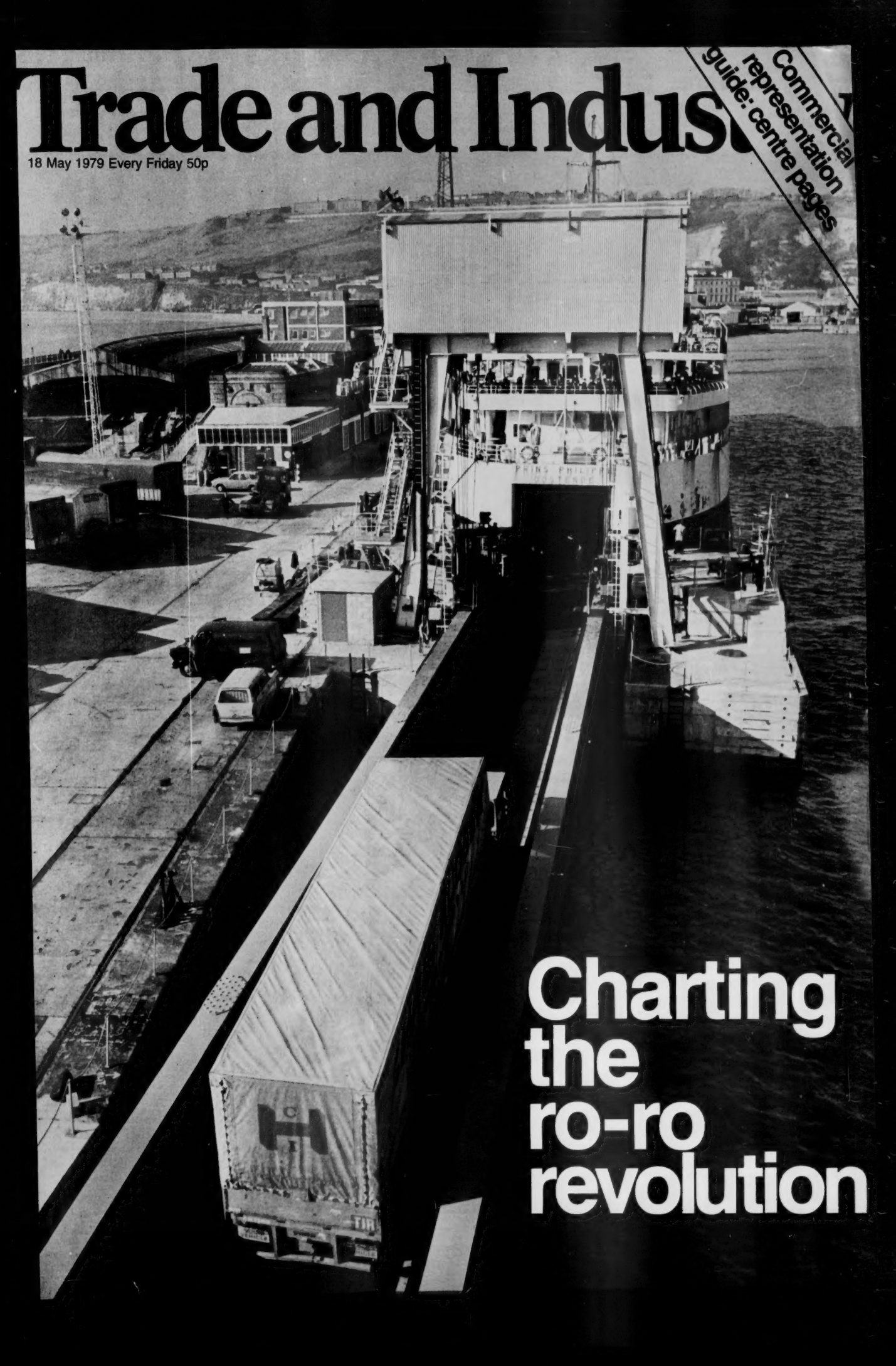
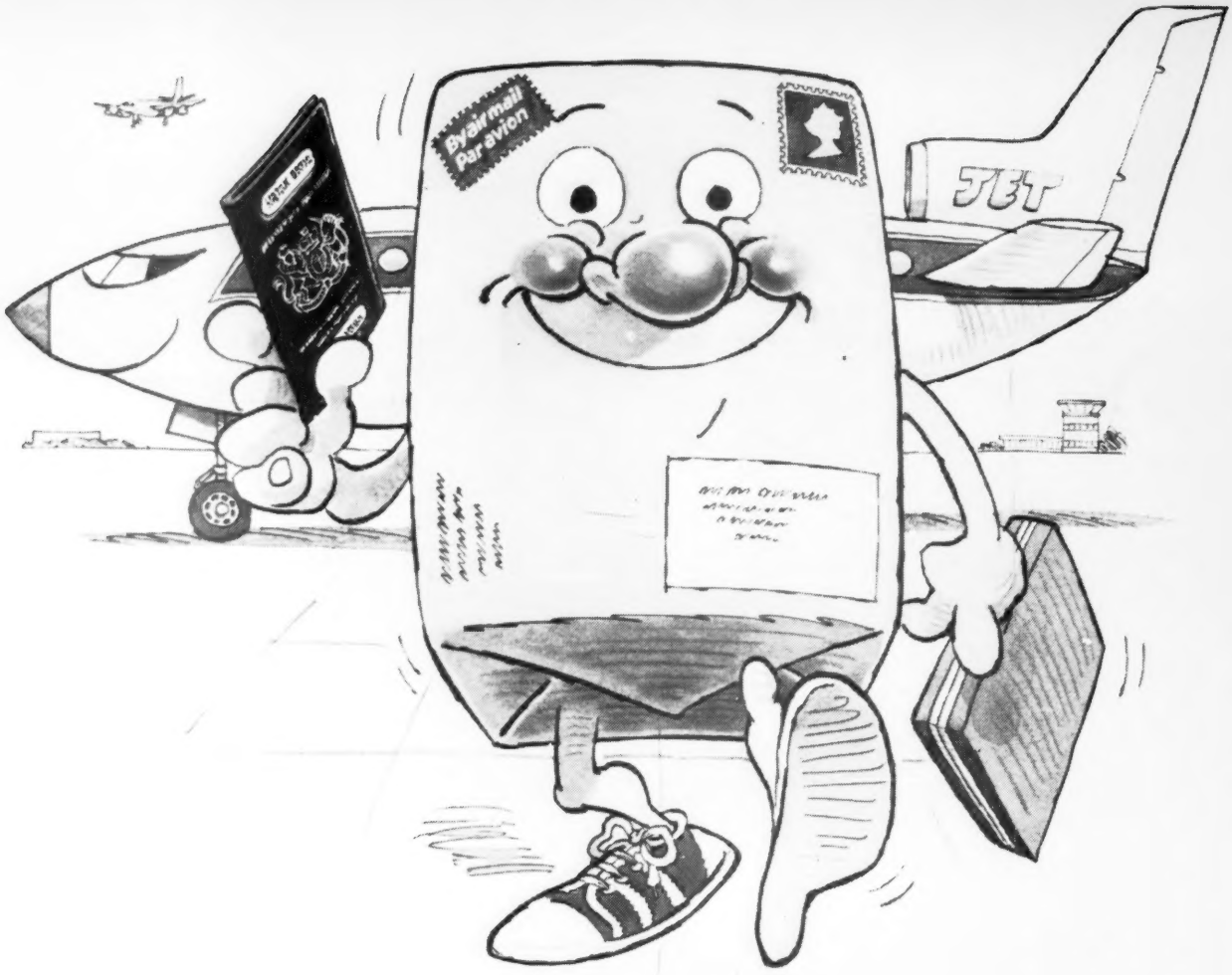
Trade and Industry
18 May 1979 Every Friday 50p

Commercial representation guide: centre pages



Charting the ro-ro revolution



Simpler documentation: no extras!

Life's a lot easier when you export through the Royal Mail.

Customs documentation is reduced to one or two simple forms.

The time-consuming problem of reconciling complex freight estimates with the final invoices no longer exists. And costly 'extras' like collection, handling, customs documentation, airport taxes and (to most countries) delivery, are all included in the price of a stamp.

And that's all.

For example, a recent independent survey showed that the cost of sending Royal Mail Air Parcels can average between ⅓ and ¼ of air freight charges. And, of course, if speed is not your priority, you can save still more with our Surface Parcel service.

Either way, your parcels get red-carpet treatment, with quick customs clearance and tight security.

If you send goods abroad regularly, surely it makes sense to find out more about Royal Mail Overseas Parcels. Simply telephone 01-476 7877 or return the coupon NOW!

FIND OUT MORE!

To: Stanley Patterson,
FREEPOST, Room 136, Postal Headquarters,
St. Martin's-le-Grand, LONDON EC1B 1HQ. (No stamp required.)

Please:
Ask my Postal Services Representative to give me a presentation on Royal Mail Overseas Parcels. ☐
Send me your comprehensive Overseas Mail data file. ☐

NAME

POSITION

COMPANY

ADDRESS

POSTCODE

TEL:

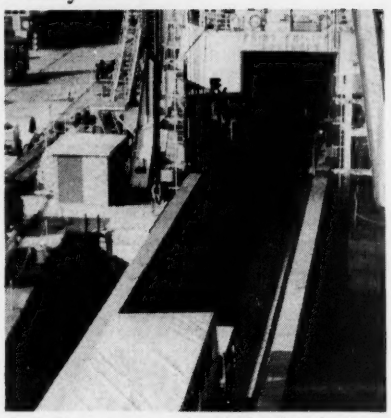
TI 18-5

Royal Mail
OVERSEAS SERVICES

Trade and Industry

18 May 1979

Weekly news magazine of the Departments of Industry and Trade



Freight carried on roll-on/roll-off ferries has risen from 2.7 million tonnes in 1970 to 11.5 million tonnes in 1977. This revolution in freight transport is charted in our special feature on page 296.

Trade and Industry
Incorporating the Board of Trade Journal
Volume 35 no. 7

Pages 281 to 324. 18 May 1979.

Price 50p. Every Friday.
Annual subscription including postage £34
Europe £37
Overseas (outside Europe) airmail £50

Editorial
Eighth floor, 1 Victoria Street, London SW1H 0ET
Telex 8811074 answer back DTIHQ G LONDON
Editorial inquiries 01-215 5730
01-215 3018
01-215 5786

Managing editor	Alan Williams	
Editor	Gillian Samuel	
Home, overseas and EEC news	Maureen Miller Marianne Semadeni Alex Mayne-Reid	
Special features	Ann Edge	
Technology news	Peter Curtis	
Art and production	Bob Priestley Geoff Heaford John Rowles	
Business manager	Raymond Wilson	01-215 5655
Assistant business manager	Jackie Stephens	01-215 5656
Circulation control		01-215 5021

Advertisement department
13 Great James Street, London WC1N 3DP 01-242 9478
Telex 299043 answer back ADDEPT G

Advertisement director	Dudley Masters	
Advertisement executive	Chris Atkin	

Subscriptions: HMSO, PO Box 569, London SE1 9NH 01-928 6977 ext. 472

© Crown Copyright 1979. Not to be reproduced or transmitted in any form, including photocopying, recording or use on any information storage and retrieval system, without the specific written permission of the editor.

The government will accept no responsibility for any of the statements in the advertisements and the inclusion of any particular advertisement is no guarantee that the goods or the service advertised herein have official approval.

ABC Member of the Audit Bureau of Circulations
ISSN 0006-5323

This week

New powers for fair trading DG 282
Queen's speech proposals 282
House prices 28 per cent up 282
Price Commission index: 12.9 per cent rise 282
Duke of Kent to visit Telecom-79 282
Ferguson and General Investments report published 282
Economic indicators at a glance 284

Home news

Limits on toxic air revised 286
Industry assistance rates reduced 286
Top appointment for trade department 286
Interim increases for bakeries . . . 286
. . . brewers 286
. . . and water authority 287
Over half Royal Mint coins for export 287
Scottish chemical industry's performance 287
Government sales 287
Dunlop opens fire-appliance factory 289

Technology news

NEL photogrammetry aids quick repair of oil rig 290
DoI funds £3m machine tool R & D 290
Harwell transfers technology to Wimpey 291
UK coal experts study Hungarian development 291
Fluidised beds make contact with possible tindustrial applications 291

New products

292

Overseas trade news

Major British machine-tools exhibition in Korea . . . 293
. . . and special fairs loan backed by ECGD 293
West German fairs boost British products 293
Missions go east for British exports 293
Unctad V reviews climate for world trade 293
CAA to advise on new Hong Kong airport 294
More goods can be financed from Mexico's loan 294
Survey of West German electrical equipment certification published 294
Two conferences on exporting 294
Seminar on licensing in the US 294
Travel commission meets in London 294
Notices to importers
1740: import arrangements for restricted textiles which are re-exported 295

Charting the ro-ro revolution

296

Export services

301

Exhibitions

Striking British successes at Basle's clock show 302
Top quality visitors at Mecom 302
British tv material sold worldwide 302
Fine, fine-arts fair 303
Britain takes offshore technology to Houston 303

Country data

Australia 305, Belgium 305, Grenada 305, Hong Kong 305, Japan 305, Kenya 306, Libya 306, New Zealand 306, South Africa 306, Thailand 306, Venezuela 306

European community news

Britain 'no soft touch' Thatcher tells Schmidt 307
Energy conservation projects offered EEC aid 307
EEC to provide up to £63m for alternative energy sources 307
Jenkins calls for coal industry investment and research 308
Offshore oil relief grants must end – commission 308
Assistance for hydrocarbon development projects 308
Foreign affairs and agriculture councils held 308

Statistics

The economy: selected indicators 309
Retailers' stocks in March 310
Check trading in 1978 311
Index of retail prices for April 311
Wholesale price indices in April 312
Vehicle production: April provisional 319
Business Monitors 319
Regional development grants: first quarter 319
Particulars of dealers in securities and of unit trusts 321
Insurance Companies Act 1974: authorisations and revocations 321
Patents recorded 'licences of right' 321
Endorsement 'licences of right' cancellation 322
April steel production 322
British film fund Agency returns 323
Registrations of British, community and foreign films 323
Index to statistics 323

Readers' reply service

324

Commercial representation guide

centre pages

We're moving – again

From 21 May our address will be:

Trade and Industry
Eleventh floor
Millbank Tower
Millbank
London SW1P 4QX

Telex 918829 answer back MBTWR G

Editorial inquiries 01-211 6088/6188

The address of the advertisement department will remain unchanged.

Trade and Industry this week

HOME

New powers for fair trading DG

As part of the government's determination to strengthen competition it will introduce a short bill to strengthen the powers of the Director General of Fair Trading in the Monopolies and Mergers Commission (MMC) soon after the Whitsun recess. This will mean, said Secretary of State for Trade John Nott on Tuesday, that it will be possible to deal in particular with prices in conditions of limited competition.

The bill will also give the director general new powers to investigate the abuse of monopoly power by the nationalised industries.

The director general, Mr Nott explained, would be charged with the responsibility of investigating areas where he suspected that competition was limited. If he found that there was a prima facie case of limited competition he would now have the powers either to refer any practices which restricted competition to MMC or to make a full monopoly reference under his existing powers.

Mr Nott said that it was intended that the secretary of state should also have the power to request the director general to investigate prices in areas which appeared to be of major public concern. There would be no requirement to pre-notify price increases or freeze prices during an investigation.

Mr Nott said that MMC would be strengthened to enable it to carry out swifter investigations and the secretary of state would have the necessary powers to put MMC's recommendation's into effect.

As the first step in the government's wider review of competition policy an intensive study of the workings of the Price Commission Act had already been carried out, Mr Nott said. The conclusion was that the act's impact on inflation had been negligible. The government believed that the effect of the Price Commission Act had been to destroy jobs and new investment as well as to impose extra burdens on industry. When the proposals for strengthening competition had been passed there would be no place for the Price Commission. In the meantime its activities would be run down.

All sectoral examinations currently being conducted by the Price Commission would continue, Mr Nott explained. He added that his present intention was to allow all current investigations into individual companies to be completed with the exception of those on Rank Hovis McDougall and Allied Bakeries (see page 286). An order would shortly be made relieving firms of the need to pre-notify price increases to the commission.

Queen's speech proposals

Main proposals affecting trade and industry announced in the Queen's speech on Tuesday were as follows:

Industry and NEB. Proposals are to be brought forward by the government to amend the Industry Act 1975 and to restrict the activities of the National Enterprise Board. Other proposals will reduce the extent of nationalised and state ownership and increase competition by providing offers of sale including opportunities for employees to participate where appropriate.

Small businesses. The government will stimulate the development of small businesses on which the creation of new jobs depends. Means will be sought to reduce the administrative burdens which are placed upon them, and they will also benefit from the government's general policies on taxation, industrial relations and related employment legislation.

Company law. Legislation will be introduced to amend company law. Legislation is necessary to implement the EEC second directive on company law, which covers the formation of public companies, the subscription and maintenance of their capital, and the payment of dividends. Most of the clauses have already been examined in detail by a standing committee of the House of Commons and early enactment is desirable in view of the fact that the law should have been amended to implement the directive by December 1978. Further legislation will also be necessary to implement the EEC fourth directive on company law, which deals with company accounts. A number of further measures of company law reform will also be included in this later bill, to be introduced in 1980.

Prices. The government will publish proposals for more effective competition and fair pricing policies (see above).

Full details of the Queen's speech will be published in *Trade and Industry* next week.

House prices 28% up

Average price of dwellings on which new mortgages were approved in the first quarter of 1979 was about £18,800 and, compared with the same period a year ago, prices were 28 per cent higher, according to figures published by the Department of the Environment on Monday. Compared with the fourth quarter of 1978 the increase in average price was 5½ per cent, allowing for normal seasonal movements (4 per cent in unadjusted terms).

For new dwellings, the average price in the first quarter of 1979 was about £20,610, an increase of 6 per cent over the previous quarter, allowing for normal seasonal movements (5½ per cent in unadjusted terms) and 27 per cent higher than a year earlier.

For secondhand dwellings, the average price was about £18,450, an increase of 5½ per cent over the previous quarter, allowing for normal seasonal movements (4 per cent in unadjusted terms), and 28 per cent higher than a year earlier.

Price Commission index: 12.9% rise

The rise in the Price Commission index over the six months to April was 12.9 per cent expressed at an annual rate, it was announced on Monday. The corresponding figure for March was 12.0 per cent.

Over the 12 months to April the index rose by 8.7 per cent compared with a rise of 8.1 per cent to March.

Duke of Kent to visit Telecom '79

The Duke of Kent, vice-chairman of the British Overseas Trade Board and chairman of the National Electronics Council, will visit the world telecommunications exhibition (Telecom) in Geneva on British day, 25 September, it was announced on Monday.

The Duke will visit companies in the British joint-venture groups and attend the presentation to launch the Post Office's System X.

Ferguson and General Investments report published

The inspectors' report of their investigation into the affairs of Ferguson and General Investments Ltd (formerly known as Dowgate and General Investments Ltd) and CST Investments Ltd under the provisions of section 165(b) of the Companies Act 1948 was published on Monday.

Mr J. Jackson and Mr K. Young were appointed inspectors on 2 May 1975 under the provisions of section 165(b) of the Companies Act 1948, to investigate the affairs of Ferguson and General Investments Ltd and CST Investments Ltd. Their report was submitted on 15 January this year. Copies are available from HMSO, price £7 net.

West Germany

A major export market for British exports

A leading British Company is well established in West Germany and in 14 locations has access to every part of this massive industrial and consumer market.

The Company has extensive warehousing space, and allied facilities, which are now available to companies that are already exporting, or are anxious to establish themselves in the West German market.

A full range of support services can be provided such as –

STOCK RECEIPT – CONTROL AND DESPATCH – DISTRIBUTION AND TELEPHONE SERVICE –

together with a full administrative set-up based on local experience that can make West Germany an even more lucrative market for British exports.

for full details of locations and facilities contact:

Mr Arthur Rowlett

Technischer
Elektro-Großhandel
GmbH

TEG

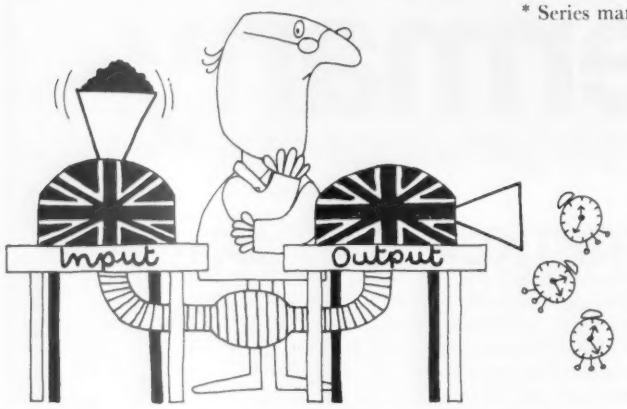
TEG GmbH,
Josef Baumann Strasse 11,
4630 Bochum 4,
West Germany

Telephone: 0234 859-1

Telex: 0825 478

Economic indicators at a glance

* Series marked with an asterisk are not seasonally adjusted.



Output

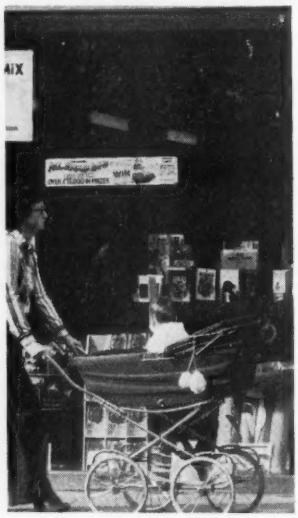
Gross domestic product, on the provisional output estimate, fell slightly in 1978 Q4 after rising sharply earlier in the year. In 1978 as a whole, output rose strongly by 3 per cent, with increased activity in the mining and quarrying industries accounting for about a quarter of the growth. Manufacturing output, however, rose by only ½ per cent in 1978.

Index of industrial production rebounded sharply in February following the settlement of the transport disputes. Manufacturing output returned to the December level. (The last two months' figures may not give a clear indication of the path of production because many of the component series measure deliveries rather than production and deliveries were more affected by the road haulage dispute.) (Provisional March figure published 18 May.)

Consumers' expenditure

Consumers' expenditure, on the first preliminary estimate, rose in volume by ½ per cent in 1979 Q1 despite a 1½ per cent fall in retail sales. The rise was mainly due to a substantial increase in expenditure on fuel and light which is not covered by the retail sales index. Expenditure in the latest two quarters rose by ¾ per cent though it was 4½ per cent higher than a year earlier. (Revised figures published 17 May.)

Retail sales. Revised figures for the volume of retail sales show that trade in both food and non-food shops in March was at about the level of last autumn following three months when retail sales appear to have been influenced by several special factors (income tax rebates and the pensioners' tax-free bonus in December and the lorry drivers' strike and bad weather in January and February). In 1979 Q1 an increase in sales by food shops of 1 per cent was more than offset by a fall in sales by clothing, durable goods and other non-food shops. (Provisional April figure published 17 May.)



Prices and costs

Wholesale price index* (provisional) for materials and fuel purchased by manufacturing industry rose sharply by 2¾ per cent in April reflecting the sharp increase in crude oil prices. In the latest three months the index rose by 3¾ per cent and was 8¾ per cent higher than a year earlier. (The index was falling in the latter half of 1977 and in early 1978.) The index for wholesale output prices rose by 1¼ per cent in April, with higher prices for petroleum products. In the latest three months the index rose by 3 per cent and was 9 per cent higher than a year earlier.

Retail prices index* with the seasonal increases in domestic rates, rents and water rates, rose by 1¾ per cent in April. The year-on-year increase in the index continued to edge up from 9.8 per cent last month to 10.1 per cent in April.

Terms of trade. During 1978, export prices rose much faster than those of imports and the terms of trade index rose by almost 4½ per cent between the fourth quarters of 1977 and 1978.

UK competitiveness, measured by normalised unit labour costs, was worse in the first three quarters of 1978 than in the previous year. Much of the improvement experienced during 1976 when sterling was falling has now been eroded.

Investment

Manufacturing industry's volume of fixed investment was unchanged in 1978 Q4. In 1978 as a whole, it rose by nearly 8 per cent. Excluding the iron and steel industry, the increase was 14 per cent. If expenditure by the distributive and service industries on assets for leasing to manufacturing industry is included, the estimated level in 1978 was about the same as the all-time peak in 1970.

Distributive and service industries' volume of fixed investment (excluding shipping) was 8 per cent higher in 1978 than in 1977.

The DoI investment intentions survey carried out in November/December confirms the results of previous surveys which indicated a further increase in 1979 in the volume of investment by both the manufacturing industries and the distributive and service industries (excluding shipping). For manufacturing industries, a rise of 4 to 8 per cent in 1979 is suggested by the present survey, with increases in most industry groups and especially in the textiles, leather and clothing group. Investment by manufacturing as a whole in 1980 may be slightly less than in 1979. In 1979 and probably in 1980 investment excluding the iron and steel industries is likely to change in line with the total. For the distributive and service industries, a rise of 3 to 7 per cent is expected in 1979 with a similar rise in 1980.

Incomes

Real personal disposable income (RPDI) rose by 1½ per cent in 1978 Q4 giving a large increase of 6½ per cent in 1978 as a whole. The rise in 1978 followed falls in the previous three years.

Average gross earnings* (new series) rose in the year to February by 14.9 per cent but by around 13½ per cent if a lump-sum Post Office productivity payment paid in February is excluded. By February, average earnings increased by only a little more in the current pay round than over the same period a year ago, with 2.7 million workers having reached effective settlements as against 2.1 million last year. By April, 5 million workers had settled, about half those likely to be involved in major settlements notified to the Department of Employment. (March figures published 16 May.)

Labour

Unemployment (UK, excluding school leavers) fell sharply by 39 500 during April to 1 310 900 (5.5 per cent of all employees). The falls in the latest two months have a little more than offset the increases in January and February when the level was affected by the bad weather and transport disputes. (May figures due to be published 22 May.)

Unfilled vacancies (mainly for adults) notified to employment offices rose by 12 700 in April to 249 700 and in the latest three months were over 22 per cent higher than a year earlier. (May figures due to be published 22 May.)

Companies

Gross trading profits of industrial and commercial companies, excluding those engaged in North Sea oil and gas activities and net of stock appreciation, rose by 14 per cent in 1978, much less than in 1977.

Liquidity of the (large) industrial and commercial companies replying to the DoI's company liquidity survey, having fallen appreciably since 1978 Q2, was still 5½ per cent higher at the end of 1978 than a year earlier. For manufacturing companies alone, the level of liquidity at the end of 1978 was about the same as a year earlier, still high by past standards.

Net borrowing requirement of

industrial and commercial companies' was much the same in 1978 as in 1977.

Balance of payments

Current account of the balance of payments was in surplus by £398 million in 1978 Q4 and by £254 million in 1978 as a whole, slightly less than in 1977. The deficit on visible trade was £1,175 million in 1978 while the surplus on invisibles was £1,429 million, both figures much smaller than the corresponding ones for 1977. It is estimated that the current account was in balance in January

UK official reserves* fell by $480 million during April. The fall was more than accounted for by an early repayment to the International Monetary Fund by the government of $1,004 million plus a scheduled repayment of $81 million in respect of drawings on the IMF's oil facility.

Volume of imports and exports fell sharply in January as a result of the road haulage dispute. The trade figures for the five months to January were distorted by the effects of industrial disputes. Therefore, although the figures show that exports and imports fell by 3½ per cent and 2½ per cent respectively in the three months to January it is judged that the underlying trend in both cases remained upward. (The February and March trade figures are not yet available).

DoT's survey of short-term export prospects, based on replies received from 54 large exporting companies, suggests that the volume of UK exports will increase by 3 to 4 per cent in the first half of 1979 following a similar rise in the second half of 1978. Growth may continue at a similar rate in the third quarter. Respondents are expecting a somewhat faster rate of growth in their export prices during 1979 compared with last year. (The survey was conducted largely during January and February but it is likely that the effects of the industrial disputes are not fully reflected in the forecasts.)

Exchange rate

Effective sterling exchange* The rate index fell sharply during the week to 66.4 by the close on Thursday 10 May (December 1971 = 100).

Shipping order passes halfway mark

The 4400 tonne bulk carrier *Chorzow*, part of the £115 million shipping order for Poland, glides down the slipway watched by Scottish shipbuilders as it is launched on the River Clyde. Built by Govan Shipbuilders, it is the seventh of the 13-ship order for the Polish Steamship Company. The total order is scheduled to be delivered by autumn 1979 and will consist of nine 4400 tonne bulk carriers and four 16 500 tonne ships.

Exchange rates

The bank note rates of exchange in London on 11 May are given below. Supplied by Thomas Cook Bankers Ltd, the rates are intended as a guide only and are subject to fluctuation. OECD countries are shown in bold.

		You buy at	You sell at
Afghanistan	Afghani	125	1.45
Andorra	(See France and Spain)	—	—
Antigua	E. Caribbean dollar	5.40	5.60
Argentina	Peso	2 400	2 800
Australia	**Dollar**	**1.8350**	**1.8950**
Austria	**Schilling**	**28.20**	**30.20**
Bahamas	Dollar	2.05	2.20
Bahrain	Dinar	0.80	0.835
Barbados	Dollar	3.98	4.31
Belgium	**Franc**	**63.00**	**66.50**
Belize	Dollar	4.20	4.77
Benin	CFA	455	475
Bermuda	Dollar	2.00	2.14
Bolivia	Peso	45	58
Botswana	Pula	1.95	2.15
Brazil	Cruzeiro	50	63
Brunei	Dollar	4.60	4.80
Cameroon	CFA	455	475
Canada	**Dollar**	**2.3650**	**2.4350**
Chile	Peso	70	84
China	Ranimba Yuan	Refer	Refer
Colombia	Peso	75	85
Costa Rica	Colon	18.50	22.50
Cyprus	Pound	0.71	0.75
Denmark	**Krone**	**10.82**	**11.32**
Dominica	E. Caribbean dollar	5.40	5.60
Ecuador	Sucre	53	65
Egypt	Pound	1.51	1.68
Eire	**Pound**	**1.0250**	**1.0650**
Fiji	Dollar	1.76	1.84
Finland	**Markka**	**8.15**	**8.50**
France	**Franc**	**8.85**	**9.25**
Germany, FR of	**Deutsch-mark**	**3.84**	**4.06**
Gibraltar	Pound	1.00	1.05
Greece	**Drachma**	**73.50**	**78.50**
Grenada	E. Caribbean dollar	5.40	5.60
Guyana	Dollar	9.25	Refer
Hong Kong	Dollar	10.10	10.53
Iceland	Krona	**777**	**807**
Indonesia	Rupiah	1 400	1 600
Iran	Rial	190	Refer
Iraq	Dinar	0.72	0.78
Israel	Pound	45	48
Italy (20 000 and smaller)	**Lira**	**1 700**	**1 785**
Japan	**Yen**	**440**	**465**
Jordan	Dinar	0.62	0.66
Korea	Won	1 350	1 550
Kuwait	Dinar	0.58	0.61
Lebanon	Livre	6.80	7.30
Liberia (See USA)		—	—
Libya	Dinar	1.05	Refer
Luxembourg (See Belgium)	**Franc**	—	—
Madeira (See Portugal)	Escudo	—	—
Malaysia	Dollar	4.64	4.86
Malta	Pound	0.73	0.76
Mauritius	Rupee	11.88	13.75
Mexico	Peso	45	54
Monaco (See France)	Franc	8.85	9.25
Netherlands	**Guilder**	**4.19**	**4.42**
New Zealand	**Dollar**	**1.92**	**2.01**
Nigeria	Naira	Refer	Refer
Norway	**Krone**	**10.50**	**10.95**
Oman	Rial	0.72	0.765
Pakistan	Rupee	20	26.50
Peru	Sol	400	550
Philippines	Piso	15	18
Portugal	**Escudo**	**97**	**102**
Qatar	Rial	7.85	8.20
Saudi Arabia	Rial	6.95	7.31
Seychelles	Rupee	12.77	13.25
Sierra Leone	Leone	2.25	2.50
Singapore	Dollar	4.48	4.67
South Africa	Rand	1.97	2.13
Spain	**Peseta**	**132.50**	**139.50**
Sweden	**Krona**	**8.93**	**9.33**
Switzerland	**Franc**	**3.48**	**3.70**
Syria	Pound	8.25	9.50
Taiwan	Dollar	Refer	Refer
Thailand	Baht	36	45
Trinidad and Tobago	Dollar	5.30	6.40
Turkey	**Lira**	**85**	**89**
Uganda	Shilling	Refer	Refer
United Arab Emirates	Dirham	8.00	8.35
USA	**Dollar**	**2.0450**	**2.1050**
Venezuela	Bolivar	8.75	9.75
Yemen Arab Republic	Rial	13	15
Yugoslavia	Dinar	41.75	43.75
Zambia	Kwacha	5.50	Refer

Where more than one rate applies to a currency, the rate given is that for small denomination notes.

Finance

Public sector borrowing requirement (PSBR) was £2.7 billion in 1978-79 Q3 and £6.6 billion in the first three quarters of the last financial year. The 'limit' for 1978-79 is £8.5 billion.

Domestic credit expansion was negative in the banking month to mid-March. The contraction of £0.3 billion was achieved by substantial sales of debt to the UK non-bank private sector with, exceptionally, a small surplus on the central government account. Bank lending to the private sector continued at a high level, however.

Sterling M3 fell by £0.4 billion (0.8 per cent) in March but in five months since mid-October it rose by about 4 per cent (10 per cent at an annual rate) compared with the guidelines of 8 to 12 per cent growth in the year to mid-October 1979. (Mid-April figure published 17 May.)

Bank of England minimum lending rate (MLR) – 12 per cent, effective from 5 April.

More information

For a backrun of figures for some of these indicators see 'The economy: selected indicators', page 309. Inquiries on any of these indicators should be addressed to Economics and Statistics Division 4B, Departments of Industry and Trade, Room 173, 1 Victoria Street, London SW1H 0ET, tel. 01-215 3453.

Home news

Limits on toxic air revised

A revised list of recommended limits for airborne concentrations of over 500 potentially toxic substances was published on 9 May by the Health and Safety Executive.

The limits, or threshold limit values (TLVs), are published in a guidance note (EH 15/78, HMSO, 30p plus postage), which reprints in full the list of TLVs adopted by the American conference of governmental industrial hygienists. It also lists 15 substances for which the executive recommends different limits.

The TLVs are under constant review and are revised annually. The main list includes 24 new TLVs for such substances as chloroform and paraquat and, in addition, there are 37 substances including aspirin and ethylene dichloride for which there are proposed TLVs in the 'notice of intended changes' section.

The TLVs are expressed in two forms: TLV-TWA which is the concentration to which most workers may be exposed on a time-weighted average for eight hours a day over a 40-hour working week; TLV-STEL which is the short-term exposure limit, or maximum concentration to which a worker can be exposed for up to 15 minutes without suffering intolerable irritation, irreversible tissue change or mental confusion. In addition, many substances are given a 'C' rating (TLV-C), indicating that this is the ceiling limit above which workers should not be exposed at all.

The note stresses that TLVs should not be regarded as sharp dividing lines between 'safe' and 'dangerous' concentrations, and the best working practice is to maintain levels as far below the published limits as reasonably practicable. This reflects the Health and Safety Commission's policy (Guidance note EH18, 'Toxic substances: a precautionary policy', HMSO, 30p plus postage) on exposure to all chemicals. The note also warns that a substance is not necessarily safe because it has no listed TLV.

Information is given in the note on carcinogens and suspect carcinogens, including materials prohibited in the UK under the Carcinogenic Substances Regulations 1967. It also advises on such matters as calculating TLVs for mixtures, and on assessing an 'excursion factor', which can be a useful rule of thumb guide for brief exposure to substances without a 'C' rating.

We're moving – again

From 21 May our address will be:

Trade and Industry
Eleventh floor
Millbank Tower
Millbank
London SW1P 4QX

Telex 918829 answer back MBTWR G

Editorial inquiries 01-211 6088/6188

The address of the advertisement department will remain unchanged.

Industry assistance rates reduced

Maximum rate of interest relief grant and interest rates for loans under section 7 of the Industry Act 1972 were reduced on 8 May.

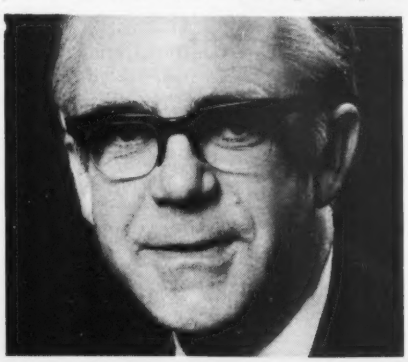
The rate of interest relief grant available in those cases where it would be appropriate to allow the equivalent of an interest free period on a Department of Industry loan – but where firms obtain their finance from other sources – is being reduced from 13 per cent to 12 per cent for each interest free year.

The 'concessionary' rate of interest on loans for employment creating projects (category A) is reduced from 10 per cent to 9 per cent. The 'broadly commercial' rate of interest on loans for modernisation projects not providing additional employment (category B) is reduced from 13 per cent to 12 per cent.

Top appointment for trade department

Prime Minister Margaret Thatcher, with the trade secretary's agreement, has approved the appointment of Sir Kenneth Clucas to be the permanent secretary of the merged Departments of Trade and Prices and Consumer Protection. Sir Kenneth, who is 57, has been permanent secretary of the Department of Prices and Consumer Protection since 1974.

Sir Leo Pliatzky, who was permanent secretary of the Department of Trade, will be retiring from the public service when he reaches 60 in August. Meanwhile he is undertaking special duties.



Interim increases for bakeries

The Price Commission[1] has decided to allow RHM Bakeries Ltd and Allied Bakeries Ltd interim price increases while it continues its investigations into the two companies.

RHM has been granted an overall weighted average increase of 3.98 per cent, against 6.41 per cent originally notified, and Allied has been allowed an average increase of 4.37 per cent, compared with 6.26 per cent originally sought.

In the case of both companies the increases allowed will mean an extra 1p on large (800 g) standard loaves, and ½p on small (400 g) standard loaves. They had originally wanted 2p on the large and 1p on the small standard loaves. On non-standard loaves the interim increases allowed are 2p on the large size and 1p on small loaves. The completion dates for the investigations are 4 August for RHM and 11 August for Allied.

. . . brewers

Bass Ltd has been allowed further price increases by the Price Commission – while investigations into the company's proposal to raise its prices are completed.

The commission has agreed to increases of 2.01 per cent on the wholesale price charged by Bass for its own beers and of 2.88 per cent on beer and other sales in the company's managed houses.

On the wholesale price of its own beers, Bass has now been granted a cumulative interim increase of 6.27 per cent (against 7.94 per cent originally sought); on sales in its managed houses, the cumulative interim increase of 7.90 per cent equals the full amount originally sought.

The investigation is due to be completed by 21 May.

The balance of the price increases originally sought by Whitbread and Co has been allowed by the Price Commission while it completes its investigation into the company's proposal to raise its prices.

The full increases which the company

[1] Proposals to abolish the Price Commission were announced by the government on 15 May, see page 282.

sought and which are the subject of the investigation are 5.65 per cent on the wholesale price of the company's beers, wines, spirits, soft drinks and ciders and 8.82 per cent on drinks, food and accommodation in managed houses. The commission had previously agreed interim increases of 3.36 per cent on the company's wholesale prices and 4.52 per cent on managed house sales.

The increases would allow the equivalent of 3p a pint on most beers in the company's managed houses, of which 2p has already been implemented.

This investigation is due to be completed by 23 May.

. . . and water authority

The Price Commission is also to allow the Welsh Water Authority interim increases for the supply of measured water – mainly to industrial and commercial users. The volume charge for measured water can be raised to 72p per thousand gallons, against the 74p sought by the authority. The new volume charge is equal to an increase of 12½ per cent.

A standing charge based on meter size in place of the present minimum charge based on rateable value has also been allowed.

With earlier interim increases granted, the authority has now been allowed a total overall weighted average increase of 11.88 per cent, compared with 13.90 per cent originally sought. The investigation is due to be completed by 23 May.

Over half Royal Mint coins for export

Production at the Royal Mint at its Llantrisant factory in mid-Glamorgan exceeded 1870 million coins during 1978.

Of the coinage produced, more than 52 per cent of the year's production was for overseas governments. In addition to its own production, the Royal Mint arranged for some 676 million coins to be struck by sub-contractors working under supervision, all of which were for overseas governments.

A total of 84 736 medals were produced during the year, including 11 with new designs.

'Say buddy, I said a *dime* – what d'ya call this thing with corners?'

Scottish chemical industry's performance

An analysis of the latest Scottish Office statistics shows that in the 10 years from 1969 to 1977 the chemical industry's production increased by 57 per cent according to the Chemical Industries Association. On the jobs front, against a general shift away from manufacturing industry into non-production employment, the chemical industry maintained employment levels more successfully than most other industries.

Super hovercraft shows its paces on the Thames

Passing under Tower Bridge to enter the pool of London is the 300-ton Super 4 hovercraft *The Princess Margaret*. It was being demonstrated on the Thames before making its way to Dover to join British Rail's Seaspeed fleet and enter service between Dover, Boulogne and Calais. *The Princess Margaret*, after being lengthened by 17 metres at the British Hovercraft Corporation works at Cowes, was launched on 23 April. Its work capacity has been increased by 70 per cent and it is now capable of carrying 416 passengers and 60 cars. Service speed will be 65 knots enabling the Channel to be crossed in 30 minutes.

Government sales

4-6 June 1979 – Vehicles

Location:
Ordnance Storage and Disposal Depot, Ruddington, Notts

Auctioneer:
Walker Walton and Hanson (Dept L), Byard Lane, Bridlesmith Gate, Nottingham (0602 54272)

Morris 1000s and Travellers, Minis, 1800s. Ford Escort estates, Renault 4 and a variety of other cars. Vans and minibuses, Land-Rovers. Austin K9 signals vans, Bedford RL and TK trucks, coaches. Antar and heavy duty trucks by AEC and Leyland. Cranes, fork-lift trucks, loading shovels, dozers, tractors and a variety of other items.

Catalogues, which give details of the lots, conditions of sale, viewing times, etc, are available from the auctioneers from two weeks before and up to the day of the sale, price 40p, postage 15p.

Only SAA goes further to help you in your business

Our service doesn't just stop here.

Every evening, an SAA jumbo leaves Heathrow bound for Johannesburg.

But SAA doesn't just stop there.

Our comprehensive system serves 22 major destinations throughout Southern Africa. A unique network. And our big jet fleet ensures fast, convenient services to key centres linked with our international flights.

Our flights from London are extra fast too. The latest 747 Super B and 747SP aircraft. Our Flying Hotels.

And three of our flights are non-stop. On Mondays and Fridays non-stop to Johannesburg. On Saturdays non-stop to Cape Town plus a one-stop service to Johannesburg. Ideal for the business traveller.

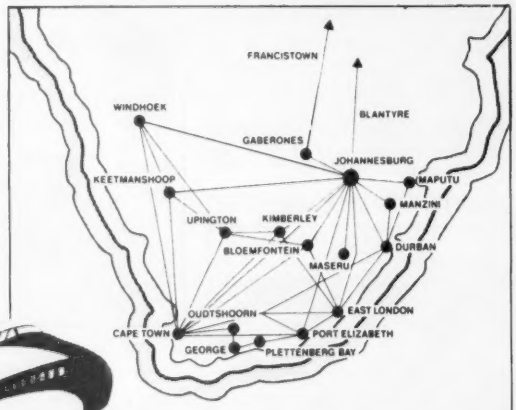
Nobody knows South Africa like South African Airways. And knowing the country as we do, we provide a first class service in the air and on the ground.

For business travel or for vital exports you need fast frequent services. That's where we come in. Your business is our business.

Our friendly, courteous passenger staff know the busy executive's needs. And cargo is cared for by the largest and most experienced cargo team in Southern Africa.

And as part of South Africa's comprehensive transport system we know about connections by air, rail or road. In fact to give you the best possible service, we pull out all the stops.

If you mean business in Southern Africa fly SAA.



Nobody knows South Africa like SAA.

SAA

South African Airways
With you all the way

251/9 Regent Street, London W1R 7AD. Tel: 01-734 9841.
South African Airways Cargo Sales and Reservations Centre, **NOW AT** Euro-Pan House, Poyle Road, Colnbrook, Bucks SL3 0AX. Telephone: COLNBROOK 3334-9.
Or at Waterloo Street, Birmingham, 021-643 9605. Hope Street, Glasgow, 041-221 2932. Peter Street, Manchester, 061-834 4436.

Dunlop opens fire-appliance factory

A purpose-built factory for the manufacture of fire appliances and emergency vehicles was opened on 9 May by the chairman of Dunlop Holdings, Sir Campbell Fraser.

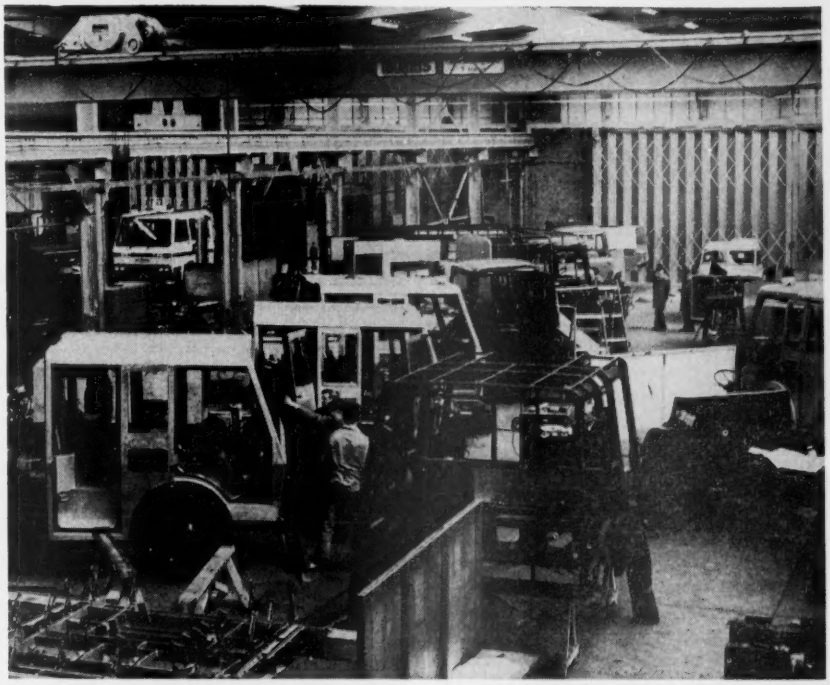
The factory, owned by HCB-Angus and situated on the south Hampshire industrial park at Testwood, is employing 180 people.

The £1.5 million investment enables the company to concentrate its manufacture at Testwood on all-metal appliances – ranging from all-purpose Land-Rover light fire appliances to major airfield crash tenders. Production of composite vehicles, wood and metal, will remain at the company's Totton factory.

The factory incorporates overhead lifting gear, electrical lifts and improved pit space to take a wide variety of vehicles at any one time.

The development will enable the company to increase its degree of off-chassis build, with increased efficiency and a faster turn-round time. A three-dimensional rig also gives a greater versatility to the manufacture of the company's crew safety vehicle.

Demand for the company's vehicles, both standard and custom-built, has increased steadily over recent years and existing facilities could no longer cope with orders particularly those from overseas, explained managing director John Hutchings at the official opening. Approximately 50 per cent of production is exported.



Fire appliances and emergency vehicles under construction in the new HCB-Angus factory at Testwood.

5 Minutes from M62 Motorway – Exit 24

ELFORD PLASTICS LTD.

INJECTION MOULDERS
of THERMOPLASTIC MATERIALS
to the following industries:

TEXTILE • RADIO AND TELEVISION
PHARMACEUTICAL •
HAIRDRESSING • CUTLERY
ENGINEERING • FANCY GOODS
AND TOYS • ADVERTISING •
AUTOMOBILE ELECTRONICS, etc.

Designers and Manufacturers of expanded Polystyrene packages for safe transit of fragile items

Moulding Capacity up to 20 ozs.
Fully equipped for the design and manufacture of injection moulds

BROOKFIELD WORKS, QUEBEC STREET, ELLAND
WEST YORKSHIRE HX5 9BX
Telephone: Elland 73053 and 72849 (STD 0422)

Technology news

NEL photogrammetry aids quick repair of oil rig

Underwater photogrammetry has been used by the Department of Industry's National Engineering Laboratory, Glasgow, to aid the repair of serious damage to one of the support legs of a North Sea oil production platform. The time and expense saved was considerable and enabled the platform to start operating six months ahead of the planned date.

Photogrammetry is essentially stereo photography using specially calibrated and accurately aligned cameras which enables remote measurements of irregular surfaces. It has long been used in terrestrial survey and occasionally in engineering topographical studies. This is believed to be the first time it has been used for a survey in the North Sea.

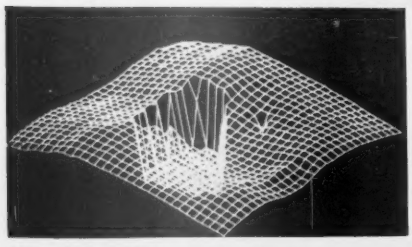
The serious damage occurred 100 m beneath the North Sea during piling operations, when a shackle broke and one of the main foundation piles weighing 240 tonnes fell about 40 m before hitting the support leg jacket. The damage, consisting of severe buckling and tears, covered an area of 6 m by 2 m at the change in section from conical to cylindrical.

It was late summer 1977 before the damage was discovered and an emergency repair programme was planned. The damage had to be repaired to regain the structural strength of the leg in order that the platform could be recertified by Lloyds. Several alternative proposals for the repair were examined, including hyperbaric welding, but because of its relative lack of complexity a bolted method of repair using high strength friction grip connectors to transfer the loads was selected.

For this method to be successful the repair patches covering the holes and the buckled area should match the distorted surface very closely. The essential step was thus to obtain a topographic map of the existing surface and so NEL was called in.

Of the methods available for obtaining the topographic data it was decided that underwater photogrammetry would be more useful than the next most likely method, mechanical pinboard templeting. The laboratory undertook the responsibility for co-ordinating the development and interpolation of the photogrammetric survey.

Computer graphic representation of damaged area of leg.



The stereo photogrammetric survey was made with a pair of 35 mm underwater cameras mounted in a frame which was specially designed for use with a locating grid, which acted as a reference plane and also as a means of achieving the required stereo overlap between adjacent horizontal and vertical stereo models.

Cameras calibrated

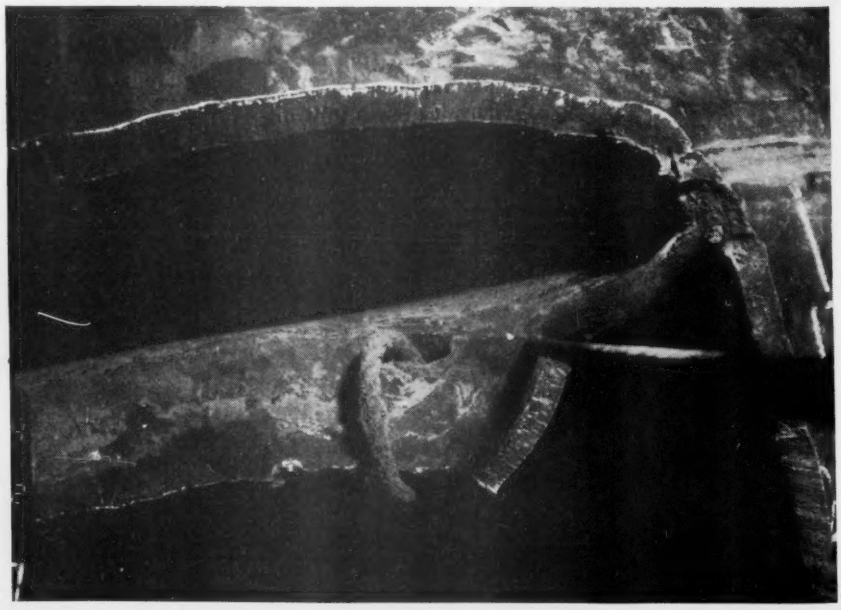
NEL's optical and applied photographic sections calibrated the cameras to be used, and to fit fiducial marks in their focal planes.

Once the photographs were obtained by the diving team they were analysed to give the raw data necessary for the next step. This produced a detailed photographic plot of the area of interest. By devising a special series of curve-fitting programmes, the systems software division of the laboratory obtained the information in graphic form.

This information was then passed to the manufacturers of the repair patches, where it was compared with the mechanical pin-board templet data. By constructing a series of templets it was then possible to produce patches to give a satisfactory fit. These patches were lowered into place in April 1978 and fitted satisfactorily with a minimum of modification.

Further information about NEL's services is available from Mr M. M. Daniel, Marketing Manager, National Engineering Laboratory, East Kilbride, Glasgow G75 0QU, tel. East Kilbride 20222.

Part of the platform leg at a depth of 100 m.



DoI funds £3m machine tool R&D

The 600 Group Ltd has acquired a research and development contract with the Department of Industry for the setting up of a flexible manufacturing system (FMS) pilot cell to machine a wide family of turned components. The contract, approved by the department's mechanical engineering and machine tool requirements board, will extend over a period of three years and involves an expenditure of £3 million.

The FMS cell will consist of a mixed range of computer numerical control and conventional machine tools and will completely machine the components. Robots will be used for automatic loading and unloading and will be linked by a palletised conveyor system. The whole will be fully integrated into a flexible transfer line under direct computer control.

The cell will be designed for fast changeovers between components and will operate at a high level of utilisation. An important objective will be to significantly reduce batch sizes with very rapid throughput time.

The research and development unit will be located at Hydro Machine Tools Ltd, Halstead, a 600 Group subsidiary, which manufactures computer numerical control lathes and which recently announced plans to market robots in the UK, especially designed for machine tool applications. As a result of this contract the 600 Group will be exploring automated small batch production concepts at the highest level of international manufacturing technology.

Harwell transfers technology to Wimpey

Techniques for carrying out the vital task of monitoring the way North Sea installations are fixed to the seabed have been licensed to Wimpey Laboratories Ltd by the Harwell laboratory of the UK Atomic Energy Authority. The agreement with Wimpey Laboratories Ltd is for the transfer of the entire Harwell-developed technology of grout monitoring. This includes the training of Wimpey staff to manufacture, install and operate the special monitors that are the essence of the work.

The techniques use radioactive tracers and gauges to monitor the position and the density of the large quantities of cement grout that are used to fix the offshore structures to the piles which support them above the seabed. Density is measured by gauges fixed to the platform during construction. For positional monitoring tracers are added to the grout when it is being mixed and this is detected by means of separate logging equipment which is run down the pile.

Harwell has been developing the instrumentation and perfecting the techniques over two-and-a-half years. It has worked on three platforms now operating in the North and Celtic seas: the giant Thistle 'A' production platform, the Cormorant 'A' platform and the Kinsale Head 'B' gas platform. With the exception of the last platform, Harwell has been carrying out grout monitoring on behalf of Wimpey Laboratories.

Currently Harwell is involved with the installation of 72 grout density gauges they have designed for the Murchison oil platform, which is in the last stages of construction at Ardesier, near Inverness. On this platform Wimpey Laboratories is also undertaking the grouting.

In the North Sea it has been found both safer and more accurate to monitor the grouting by this means than by divers' visual inspection and sample recovery. This remote method of grout monitoring has the additional advantage that it can be used all the year round. Previously divers could only carry out the task in the North Sea summer 'weather window'.

Fluidised beds make contact with possible industrial applications

Investigations into the conductive properties of fluidised beds of metal particles by Professor E. J. Davies of the department of electrical engineering at the University of Aston in Birmingham have revealed a number of potential industrial applications. Such a bed can function as a quasiliquid, non-wetting contact and can be used to conduct substantial currents to a stationary electrode or a moving part.

Potential licensees of the process are being sought by the National Research Development Corporation. Experimental work on high-current fluidised beds is continuing at Aston where a prototype wire-annealing rig can be demonstrated to manufacturers.

It has been known for some time that fluidised beds of carbon particles conduct electricity and can be heated electrically using this property. Carbon particles, however, have a tendency to form themselves into needles owing to localised overheating because of their negative temperature coefficient of resistance. Metallic particles are theoretically highly satisfactory but tend to form a non-conducting oxide coating.

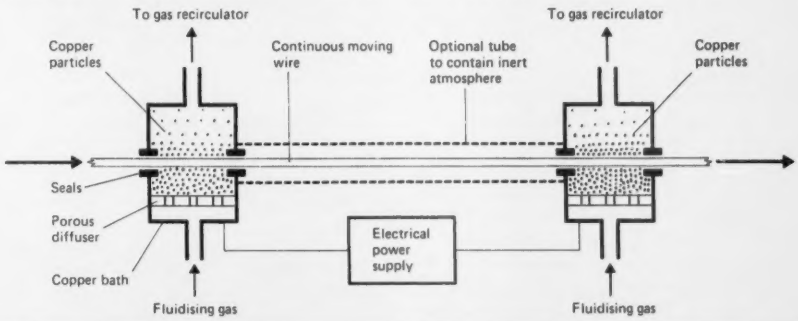
Professor Davies has devised methods for overcoming this problem of oxide formation and has demonstrated the practical benefits of such an arrangement, using copper particles around 200 μm in diameter. The copper particles are initially deoxidised by electrolysis, pickling and washing, or by the passage or a reducing gas. They are transferred into the bed in an inert atmosphere, and the bed is then fluidised using nitrogen or a mixture of nitrogen and hydrogen.

So far, a deoxidised copper bed has been made to conduct 9.5 kA, the highest current presently available from a particular university transformer, and it is believed this is well below the ultimate limit of the fluidised-bed part of the system. The voltage drop across the bed is low, typically 0.6 V.

Experimental apparatus for annealing continuous wire or strip has been constructed and has demonstrated the technical feasibility of using a fluidised-bed system for the resistance heating of wire. Each fluidised-bed copper bath is quite small, 300 mm by 12 mm by 50 mm deep. Between the beds, the wire may be passed through a tube filled with inert gas; this prevents surface contamination of the wire. The bed at the 'hot' end is water cooled.

Among other practical industrial applications of the technique is the possible use of fluidised metallic beds to form the electrical connections to the electrodes of an arc furnace. This would eliminate the conventional and expensive water-cooled flexible cables.

Initial inquiries from potential licensees should be directed to Peter Thompson, Computers, Systems and Electronics Group, NRDC, Kingsgate House, 66-74 Victoria Street, London SW1E 6SL, tel. 01-828 3400. The invention is the subject of a European patent application.



UK coal experts study Hungarian development

A contract has been signed in London by representatives of the Hungarian Geological and Mining Engineering Corporation (Geominco) on behalf of the Hungarian Ministry of Heavy Industry with Coal Processing Consultants Ltd (CPC) of Harrow. The contract is for a coal utilisation study in which CPC will advise on the development of Hungarian brown coal and lignite reserves for potential applications in power generation, gasification, and chemicals production.

Coal production in Hungary has declined steadily over the past years to 25 million tonnes per year output, but plans are now being formulated to significantly increase the production of brown coal and lignite to over 30 million tonnes per year. The Hungarian Coal Mines Trust already has a technical exchange agreement with the National Coal Board on coal mining operations, and this new contract with CPC, covering the coal processing and utilisation aspects of the Hungarian developments, serves to complement that agreement.

CPC will firstly look at how the various coal fields can best be developed to meet the industrial needs of Hungary for electric power production, advanced technology boilers, substitute natural gas, ammonia and methanol production, and combined cycle power station designs for the future. Once the most appropriate processes and technologies have been identified and evaluated, further down-stream work on the more detailed aspects is expected to follow.

CPC will be co-operating during this initial consultancy phase with the NCB and several UK companies, including Babcock and Wilcox and Foster Wheeler. In spite of stiff European competition, this study is seen as the first stage of a joint co-operating package which could lead to significant opportunities for UK industry.

We're moving – again

From 21 May our address will be:

Trade and Industry
Eleventh floor
Millbank Tower
Millbank
London SW1P 4QX

Telex 918829 answer back MBTWR B

Editorial inquiries 01-211 6088/6188

The address of the advertisement department will remain unchanged.

New products

Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

Amphibious vehicle copes with worst conditions

Terranger, an eight-wheeled hydrostatic drive vehicle, which can be registered for road use as a 'works truck', is amphibious and can traverse the worst possible ground conditions. Manufactured by Saboteur Vehicle Co Ltd and marketed by Terranger Trucks Ltd, the truck is designed to meet a wide variety of demands from many market sectors. It can be fitted with either electrically or hydraulically driven ancillary equipment for adapting the truck to applications such as surveying and forestry work.

High standard

Developed to a high standard of specification to meet demanding military requirements, the truck has a low ground bearing pressure of 0.2 kg/cm² with a 1-tonne load and a cross-country performance of up to 50 km/hr. Toboggan-shaped for ease of going in and out of rivers, the truck's jet drive unit gives speeds of 9-knots and in the water the Terranger has good stability and free-board for coping with choppy conditions.

The lightweight, robust body, comprises two main heavy gauge aluminium box section carrying the stub axles and patented drive system. Four cross-struts, in ladder construction, provide mounting strong-points for the engine and hydraulics. The body, which has two towing points at each end, has welded panels which are corrugated for maximum durability.

A 64 hp VW air-cooled petrol engine drives a Linde hydraulic transmission system comprising two swash-plate pumps which provide power to drive each side of the truck independently. Two types of steering control are available. They are a steering wheel or the 'Bell' patented rough terrain steering system which, because of its twist-grip controls, enables the driver to maintain full control during extraneous movements of the truck when negotiating obstacles. The hydrostatic drive allows precise control from 'inching' the truck over steep undulations to turning, at speed, within its own radius of 3.6 m.

Canadian lumber balloon tyres provide adequate suspension for the truck and can be inflated to grip rubber tracks for operation in deep snow. Successful snow trials, in severe sub-zero temperatures, were completed during the first six weeks of this year in Norway.

All wear parts, including the triplex transmission chains, are overdimensioned to ensure long life and reliability. All serviceable locations are easily accessible and removable panels enable inspection of the drive system which is enclosed within the main chassis members.

Further information: circle 428

Compact 3-phase meter for use in mines

A volt-amp meter which will continuously monitor the three-phase voltages and currents in sequence in a three-phase load is being offered by Shand Electronics Ltd. The unit has been developed to comply with UK mining legislation which, in effect, makes illegal the use of plug-in or clip-on voltmeters and ammeters when fault finding in mines and quarries.

Hold facility

The Auto-scan has a 'hold facility' on any input, is fixed or portable in operation and is self-powered from the measured load. When a plug-in facility is fitted, only one instrument is required for multiple installations.

It consists of a measuring instrument, a current and potential transformer unit and an inter-connecting convertor assembly. The transformer unit may be fitted within an existing installation or may be mounted in a waterproof case and installed close or fixed to the load control unit. The measuring instrument may be portable, plugged into a socket mounted on the load control unit or, with panel escutcheon, fitted directly to the load control unit.

Display is a three-digit light emitting diode showing both volts and amps. Ranges are 350 V to 450 V 50 Hz±2 per cent full scale deflection and 3 A, 30 A and 300 A±2 per cent fsd. The decimal point position for the current range changes automatically when plugged into the transformer unit. Operating temperature is −10°C to +55°C.

Further information: circle 429

All quiet in the 'hush hut'

A portable noise refuge which gives shopfloor supervisory staff a quiet area in which to work but with all-round visibility and access has been introduced by Pollards SRL Ltd, Bristol. It gives a considerable reduction in airborne noise, easing telephone conversation, improving concentration and reducing fatigue.

Rigid frame

The booth comprises a rigid metal frame panelled in overlapping strips of heavy gauge clear pvc and roofed with a solid sound absorbing panel. The strips are swung from the upper rail of the frame using a unique, specially designed fixing which avoids noise admission through gaps.

In a noisy engineering shop with ambient noise levels from 85-90dBA, the interior of the booth can show noise reductions of 15dBA or more – half the perceived noise level outside. The crystal-grade pvc strip admits light and gives a clear, uninterrupted view into and out of the hut. The huts can be built to any required size, opening up many alternative applications such as staff rest areas and telephone booths.

Further information: circle 430

Low ground bearing pressure enables the Terranger to go anywhere.

Overseas trade news

Major British machine-tools exhibition in Korea . . .

Over 50 British companies will be taking part at an all-British machine-tools exhibition in Seoul, Republic of Korea, next week (May 21 to 26). It will be the largest exhibition of British machine tools ever held outside Europe. Many of Britain's leading machine-tool manufacturers will be exhibiting, including Alfred Herbert, Coventry, Jones-Shipman, Leicester, Wickman Machine Tools, Coventry, The 600 Group, London and ABMTM of London.

The equipment being shown for the first time in Korea includes high-speed presses, automatic metal-cutting machine tools, and cutter grinding and milling machines. The exhibition is sponsored by the British Overseas Trade Board in association with the Machine Tool Trades Association and the Gauge and Toolmakers Association.

The exhibition is part of a major effort to capture a greater share of the Korean market. It follows closely on a high-level mission led by Sir Kenneth Keith, chairman, Rolls-Royce, and was arranged by the BOTB's Korea trade advisory group to show that British industry is determined to develop trade and industrial co-operation with Korea.

A special line of credit has been made available by Lloyds Bank and backed by the Export Credits Guarantee Department for this fair (see below).

. . . and special fairs loan backed by ECGD

A £10 million line of credit, guaranteed by the Export Credits Guarantee Department, has been made available by Lloyds Bank to the Korea Exchange Bank, South Korea, to coincide with the British machine-tool exhibition next week.

The loan will enable buyers in South Korea to place orders in the UK for capital goods and associated services. UK exporters will receive 80 per cent of the contract price from the loan; the remaining 20 per cent is payable from the buyers' own resources. To qualify under the terms of the loan a contract must have a minimum value of £15,000 and be placed by 31 May 1980.

This is the fifth ECGD-backed line of credit to be arranged by Lloyds Bank for the Korea Exchange Bank. The previous lines were for £6 million in 1970, £4 million in 1975, £4 million in 1976 and £10 million in 1977. All of these have been fully used.

Exporters interested in further details of this loan should contact either Mr P. E. Allen of ECGD, tel. 01-606 6699 ext. 7368, or Mr B. V. Last of Lloyds Bank, tel. 01-626 1500 ext. 3240.

West German fairs boost British products

In May, over 200 British firms are exhibiting at seven international trade fairs in West Germany with the support of the British Overseas Trade Board. British products being promoted range from textiles to woodworking machinery.

The largest joint venture of 113 firms, sponsored by the National Wool Textile Export Council, is at the forty-first international textiles for clothing exhibition 'Interstoff' in Frankfurt which opens today (18 May). British participation has steadily increased each year at this important fair.

In Cologne, at the biennial international accessory, machinery and materials fair for furniture production, interior decoration and furnishing, 'Interzum', which opens tomorrow and runs to 22 May, there will be a joint venture sponsored by the Birmingham Chamber of Industry and Commerce. The new products to be shown in Europe for the first time include a nylon glide designed for office and domestic furniture, assembly fittings, a spray machine, a twin-head quilting machine and a rotary tape edge machine for mattresses.

At the third international trade fair for machinery and equipment for the wood industry 'Ligna' to be held in Hanover from 23 to 29 May, there will be 19 firms backed by BOTB and sponsored by the Machine Tool Trades Association. 'Ligna' is one of the world's major events for the timber trade's machinery and equipment and British products on display will include machinery for all aspects of woodworking, furniture, doors, conveyors and elevators. Models and factory layouts will also be on show together with specialist publications.

Other products promoted during May at West German fairs in Düsseldorf, Pirmasens, Offenbach and Karlsruhe, include leather goods, materials and machinery for furniture production, machinery and components for the footwear industry and an extensive range of equipment and ancillary products for opticians.

Missions go east for British exports

Seven trade missions supported by the British Overseas Trade Board and mounted by trade organisations will be heading for south-east Asia from September to December.

Five of the missions will start from Singapore or include it in their itinerary. Singapore is an expanding market in its own right as well as being a useful redistribution centre and a springboard for trade with other south-east Asian countries.

The immediate demand in Singapore is for technology and capital equipment, including offshore oil supplies, transport equipment, building materials, power generation, marine equipment, machine tools, refrigeration and air conditioning systems and packaging machinery. Medical, hospital and pharmaceutical products, food and whisky, are also on the list of goods to be promoted by British firms.

Malaysia is also a target for the missions. Prospects for expanding UK exports to that country are good. The most promising areas being capital equipment including commercial vehicles, construction plant, agricultural and marine equipment, woodworking machinery, machine tools, process plant, medical, pharmaceutical and hospital products. Projects such as the modernisation of the rail network, airport, harbour and road systems improvement, agricultural and land development and the building of power stations may also offer opportunities for British consultants.

The Philippines, Brunei, Thailand and Hong Kong are the other countries included in the missions' itineraries.

The sponsors of these missions are the Leeds Chamber of Commerce and Industry, the Wolverhampton Chamber of Commerce, the British Food Export Council, the Cardiff Chamber of Commerce and Industry, the North of England Development Council, the London Chamber of Commerce and Industry and the British Management Training Export Council.

Unctad V reviews climate for world trade

Unctad V – the fifth session of the United Nations Conference on trade and development – opened in Manila on 7 May, with a wide-varying agenda. It will run until 1 June.

Priority will be given to an evaluation of world trade and the economic situation and consideration of issues, policies and appropriate measures to facilitate structural changes in the international economy.

The conference will also discuss requirements for the international monetary system which would foster world trade and development, taking more account of the adverse effects of fluctuating exchange rates and world inflation and, in particular, of the development of develping countries and their needs for balance-of-payments support.

Unctad's work programme on measures for strengthening economic co-operation among developing countries will also be considered, together with recommendations for improved institutional arrangements to promote and strengthen economic co-operation among developing countries, and measures of support for closer economic co-operation among developing countries.

CAA to advise on new Hong Kong airport

Britain's Civil Aviation Authority has been engaged to work on a study for a new airport to replace the existing Kai Tak airport in Hong Kong. The authority is working in association with Parsons Overseas Co, a subsidiary of The Ralph M. Parsons Co of Pasadena, California.

Also taking part in the project are consultants from Wilbur Smith and Associates, South Carolina, and the GMW Partnership, the London firm of architects whose work will include the development of concepts for passenger terminals and other landside facilities.

The site for the potential development is a small island adjacent to Lantao, the largest of the Hong Kong islands, and the project would involve land reclamation in water depths up to 60 feet.

The authority's work will include: studies of parallel runway separation and runway/taxiway separation; air traffic control techniques to achieve maximum use of the runways; the development of a terminal area air traffic control systems concept in order to establish potential constraints on the capacity of the new site; and a study of air traffic services and communications/navaids equipment and accommodation requirements.

The study will be used by the Hong Kong government to decide if a new airport should be built or operations at Kai Tak should be continued.

More goods can be financed from Mexico's loan

There is room for further UK exports of capital goods to be financed from a $20 million line of credit which Barclays Bank International Ltd has made available to Nacional Financiera SA, Mexico. The repayment and funding of the loan is guaranteed by the Export Credits Guarantee Department.

Under the terms of the loan UK firms supplying capital goods and associated services to Mexican buyers are able to receive 85 per cent of the contract value from the loan; the remaining 15 per cent is payable from the buyer's own resources. To qualify under the terms of the loan a contract must have a minimum value of $200,000 and be placed by 8 November.

Exporters interested in further details of this facility should contact either Ann Johnston of ECGD, tel. 01-606 6699 ext. 595, or Mr R. Payne of Barclays Bank International, tel. 01-283 8989 ext. 3621.

Survey of West German electrical equipment certification published

Manufacturers exporting electrical equipment to the Federal Republic of Germany have to comply with regulations relating to safety and radio interference suppression as German customers will often refuse to purchase equipment which does not carry some certification of compliance.

To assist UK exporters, Technical Help to Exporters (THE), the export advisory service of the British Standards Institution, has published the second edition of 'Electrical equipment certification in Germany'. Apart from a general up-dating, this edition includes a completely new section on testing for x-radiation from colour television sets.

The survey opens with a brief introduction to the subject of electrical safety regulations in West Germany, followed by some background information, including the scope of certification organisations, and an account of safety standards. It then deals with certification marks awarded by the various German authorities, the procedures for obtaining certification marks, and the preparation of equipment for export. Testing for x-radiation from colour television sets is treated separately.

The appendices, including a directory of relevant certification organisations, and a list of commonly used VDE Prüfstelle documents, have been extended and updated.

The publication costs £12 to THE members and £17 to non-members, and can be obtained from THE Sales Office, British Standards Institution, Maylands Avenue, Hemel Hempstead, Herts, tel. 0442 3111.

Two conferences on exporting

Two conferences on the ease of exporting are being held on 23 May. One is in Swansea and the other in Harrow, London. The conferences are being organised by the Swansea Junior Chamber of Commerce and the Junior Chamber of Commerce for London.

The seminars are aimed at attracting an audience from among smaller companies which have limited knowledge of export procedures, for this is an area where the British Overseas Trade Board believes that a little effort will lead to a significant boost in the national export performance.

Further information can be obtained from (London seminar) Ian Cameron Black, Junior Chamber of Commerce for London, tel. 01-623 7500, and (Welsh seminar) D. Mellalieu, tel. Clydach 843521.

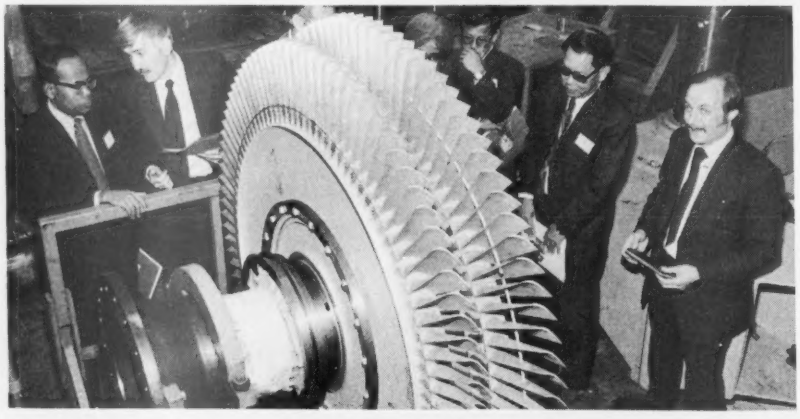
Seminar on licensing in the US

'Manufacturing under license in the USA' is the subject of a half-day conference being organised by the London Chamber of Commerce and Industry on 31 May.

Speakers will include John Millar, who will discuss the pros and cons of technology transfer, and Aaron Wise who will deal with the law as it relates to licensing.

The seminar will be held in the morning and it is hoped that the speakers will be available after lunch for detailed consultation for those requiring specialist or private advice.

Details can be obtained from John MacGregor, London Chamber of Commerce and Industry, 69 Cannon Street, London EC4N 5AB, tel. 01-248 4444.



Members of an inward mission of electricity board officials from Malaysia inspect an Olympus FS 80 power-turbine rotor at the Rolls-Royce industrial and marine division at Coventry. The mission, jointly sponsored by the British Electrical and Allied Manufacturers Association and the BOTB, visited factories and manufacturing plants in Scotland, the midlands and the north east seeing the best of British electrical power-generating equipment.

Travel commission meets in London

A three-day meeting of the European Travel Commission was held in London from 8 to 10 May. Representatives of 20 European national tourist organisations were present.

Discussions included the opening of new markets in south America, Australia and the Middle East for travel to Europe. The commission is currently concentrating its efforts on attracting visitors from the United States, Canada and Japan. The commission aims to increase the number of visitors to Europe from Japan from 350 000 to 400 000 by 1980. It is felt that if these objectives are to be achieved it is urgently necessary for all European tourism interests to make attractive packages at attractive prices more easily available to Japanese visitors, to match the lower air fares at present operating across the Atlantic.

Notices to importers

Issued by the Department of Trade, Import Licensing Branch, Charles House, 375 Kensington High Street, London W14 8QH. Telephone inquiries should be addressed to the number at the end of the notice.

1740: import arrangements for restricted textiles which are re-exported

This notice sets out the arrangements for the import of textile goods which are subject to import restrictions and which are subsequently re-exported. The scheme is administered by the Department of Industry (CT Div, Manchester) which, if satisfied that the goods concerned will be or have been re-exported, will recommend to the Department of Trade (ILB) that an import licence be issued outside any quota arrangements. Generally, to qualify under the scheme, such goods must be re-exported to countries outside the EEC; however, in certain cases re-export licences may be granted where goods are to be re-exported to another EEC country, provided the applicant can prove to DoI's satisfaction that the country concerned has no import restriction on the goods.

Jute
The re-export arrangements for jute categories 4, 5, 6 and 7 will continue to operate as set out in NTI 1582, but jute categories 1, 2 and 3 will be dealt with under this notice.

Qualifications
There are three ways in which restricted textiles may qualify under this scheme:
1 Goods originally imported under a quota licence for retention on the domestic market, but which are subsequently re-exported. Such goods may qualify for a replacement licence.
2 Goods imported specifically for re-export without further processing. Such goods may qualify for re-export licences.
3 Goods imported for processing either by the importer or by the importer's customers, and eventual re-export in a different state from that in which the goods were imported. Such imports may qualify for process re-export licences.

Replacement licences
An importer who exports goods originally imported by him under a quota licence, or sells such goods in the UK to a buyer who subsequently exports them, may apply for a replacement licence. Applications will however only be considered if received within 12 months of the original importation of the goods.

Applications should be made to CT Manchester, at the address shown below, in triplicate on replacement form EX/A, and should be accompanied by a completed form ILB/A, evidence of export (eg copy bill of lading) and clear evidence that the goods were originally imported under a quota licence. No applications will be considered for goods originally imported under an import for re-export licence. No assurance can be given that a licence will be issued in response to particular applications; any which are issued will be valid for one year (and will not be renewable), will cover only goods of the same category and origin as those originally imported, and will be issued only to the trader who originally imported the goods.

Import for re-export
Restricted textiles which are intended for re-export in the same state as originally imported may be licensed outside quota arrangements, subject to satisfactory undertakings by the applicant. Applications for licences for such goods should be made to CT Manchester, at the address shown below, in triplicate on undertaking form EX/B, and should be accompanied by a completed form ILB/A and documentary evidence of firm export orders or evidence of a continuous pattern of export trade during the 12 months prior to the date of the application. Licences will be issued on the understanding that quarterly statistical returns, showing the quantity imported against the licence and subsequently re-exported, be made to CT Manchester on form EX/C, within 14 days of the end of each quarter, and that the applicant's records be open to inspection by officials of the DoI.

Process and re-export
Restricted textile goods which are intended for re-export after further processing may also be licensed outside quota arrangements. Traders may apply for such licences by submitting to CT Manchester, at the address shown below, completed form EX/B, in triplicate, together with a completed form ILB/A. The same conditions concerning quarterly returns and inspection of records by officials of the Department of Industry will be required for process and re-export trade as for import for re-export trade set out above, and providing the importer retains ownership and exports the processed goods, the system will be the same as that used for imports for re-export. If the importer wishes to sell the goods to a third party in the UK who would be responsible for the processing and subsequent re-export, then he (the importer) must:
1 Obtain the department's permission as provided in condition (a) on form EX/B and;
2 Require his customer to complete the export undertaking form EX/D and submit it to CT Manchester, at the address shown below.

Traders should note however that where the state of the goods or any part thereof is changed, or they are incorporated in other goods prior to export, only one operation and one change of ownership will normally be permitted (eg re-export licences will not be issued for the importation of yarn for weaving into cloth and subsequent making up into other articles before exportation).

The conditions applying to such third parties dealing in this trade are the same as those applying to the original importer; primarily they must furnish the department with quarterly returns showing the quantity of goods exported against these licences. Where sacks, bags and other packaging material made from restricted textiles are used as containers for other articles being exported they will not qualify for re-export licences.

General
Importers should note certain essential features of these arrangements:
☐ All applications should be made to CT Manchester, at the address shown below.
☐ The Department of Industry places importance on the prompt return of quarterly information required; the Department of Industry will not normally consider applications for subsequent licences for either import for re-export or process and re-export from any trader whose quarterly returns in respect of previous licences have either not been received or have proved unsatisfactory.
☐ Applications recommended by the department will be forwarded to Import Licensing Branch for the issue of licences and the applicants may then make firm arrangements with overseas suppliers.
☐ No guarantee can be given that licences will be issued against any application and importers are advised that all orders for restricted textiles should be made conditional on receipt by them of the necessary licence. When imported goods fall within one of the multi-fibre arrangement categories (for full description see NTI 1691, *Trade and Industry*, 28 July 1978) then that category shall be specified in the application.

Finally, the new customs warehousing procedures, which were introduced on 1 April 1979, may in certain circumstances provide a more convenient arrangement for those importers who are intending to re-export their goods. Details of these warehousing facilities are available from Customs and Excise, International Customs Division F, Branch 3, Mark Lane, London EC3R 7HE, tel. 01-626 1515 ext. 2209.

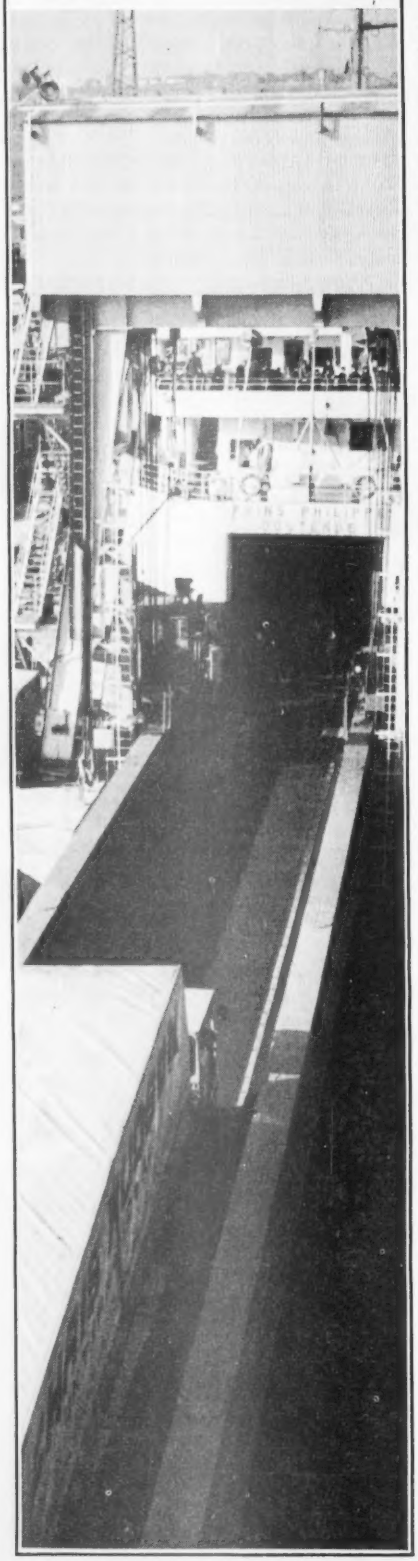
Inquiries about the administration of these arrangements and requests for the forms referred to in this notice should be made directly to: Chemicals and Textiles Division, Department of Industry, Britannic Building, 60 Fountain Street, Manchester M2 2FL, tel. 061-832 5541.

Other inquiries may be addressed to: Chemicals and Textiles Division, Department of Industry, Ashdown House, 123 Victoria Street, London SW1E 6RB, tel. 01-212 0674.

A library for exporters

Trade and other economic statistics from almost every country in the world, including the UK, are available for reference in the Statistics and Market Intelligence Library at Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 ext. 368/369, telex 886143 (DTI Export LDN). A modern well-equipped library of over 100 000 volumes, it has a public reading room equipped with microfiche readers and photocopying facilities. Among the documents available are foreign trade directories covering some 170 countries and selected trade fair catalogues. The library is open from 09.00 to 17.30, Monday to Friday (last passes for the building are issued at 17.15).

Charting the ro-ro revolution



Of all the developments in freight transport over the last 20 years none has been more remarkable than the growth of international road haulage between Great Britain and Europe. This article considers some of the main developments in international road haulage traffic carried by ro-ro ferries between Great Britain and the continent. It is based largely on the results of the quarterly ro-ro surveys (qrrs) carried out by the directorate of statistics in the Department of Transport. It is intended as an introduction to quarterly statistical tables which will feature in future issues of 'Trade and Industry'.

When the Ministry of Transport (now the Department of Transport) began negotiations with foreign authorities in 1965 to secure rights for the movement of UK lorries abroad, international haulage had been growing rapidly for several years. But it was still a relatively small and specialised market – around half a million tonnes of goods were carried in 1965. Since then, international road haulage has continued to grow vigorously and an extensive network of roll-on/roll-off ferry services (ro-ro) has developed to handle the traffic.

In 1970, 2.7 million tonnes of goods were carried by road vehicles on international ro-ro services. By 1977 this had increased to 11.5 million tonnes worth some £14 billion or approximately 50 per cent by value of UK trade with Europe (excluding fuels). The EEC accounted for the bulk of traffic – over 60 per cent of EEC-UK trade was carried by road/ferry in 1977 – but virtually the whole of Europe, the middle east and north and west Africa was encompassed in the expansion of international road haulage services from the UK.

The growth of international ro-ro services had important implications not only for road haulage but also for the ports, where substantial investment has been needed to provide the facilities required by ro-ro vessels. Evidence of the impact of ro-ro can be seen in the three-fold increase in 'wheeled' traffic through Dover and Felixstowe between 1970 and 1977.

The qrrs are started in 1971 to monitor the growth of international road haulage and to provide information on the numbers and nationalities of goods vehicles travelling between Great Britain and the continent. Subsequently, the coverage was extended to include ferry traffic between Great Britain, the Republic of Ireland and Northern Ireland.

The operator of each ferry service provides a quarterly return of the numbers of road goods vehicles carried inward to and outward from Great Britain ports showing separately unaccompanied vehicles (trailers and semi-trailers shipped without a tractive unit) and powered vehicles. A breakdown by country of registration is requested and is provided for all but a small proportion of powered vehicles; similar information for unaccompanied vehicles is obtainable from only a few operators at present.

Only traffic to the continent is considered in detail in this article. Since the data available from the qrrs for Irish routes are less detailed and relate to only three companies, they are to a large extent confidential. The freight market between the Irish Republic and the UK in any case requires different treatment because of the virtual monopoly by Irish Republic and UK vehicles, and the existence of the land frontier over which much of UK-Irish Republic trade moves.

Statistics of ro-ro traffic are also published by the National Ports Council (NPC) in the 'Annual digest of port statistics'. NPC statistics, derived from annual returns provided by port authorities, differ from the qrrs statistics in that they do not distinguish either different types/nationalities of road vehicles or the ports used; they do, however, include both the total numbers of vehicles and (unlike the qrrs) the tonnage of goods carried. These statistics are also more comprehensive than those from the qrrs considered in this report since they include traffic to the Irish Republic and traffic to non-European destinations, although the latter accounts for a negligible proportion of road vehicle traffic on ro-ro services.

Characteristics and trends

NPC statistics indicate that between 1970 and 1977 road vehicle traffic from Great Britain on ro-ro ferries increased by 337 per cent in terms of the tonnage of goods carried. Near sea routes (to Belgium, France, Germany, Irish Republic and Netherlands) accounted for 90 per cent of the traffic and over this period road vehicles substantially overtook containers as the principal form of unitised transport on these routes. On the longer routes to Scandinavia, Iberia and further afield, road vehicle traffic grew markedly as elsewhere but containers remained the dominant form of transport (see table 1).

Statistics available from Customs and Excise statistical office show that in 1977, international road haulage carried over 30 per cent by volume of UK non-fuel exports to the rest of the EEC and, perhaps more significant, nearly 64 per cent by value. As table 2 shows, when wider trading areas are considered the relative importance of international haulage declines but its importance to UK export trade is nevertheless underlined by the fact that 30

Table 1 **International container and ro-ro traffic 1970-77, outwards from Great Britain**

Thousands

	1970	1971	1972	1973	1974	1975	1976	1977
All Europe and Mediterranean traffic [1]								
Road goods vehicles	1 201	1 409	1 887	2 681	3 454	3 823	4 860	5 185
Other [2]	3 883	4 025	4 355	5 021	5 030	4 676	5 749	5 372
Near sea traffic [3]								
Road goods vehicles	1 094	1 271	1 703	2 440	3 156	3 467	4 446	4 713
Other [2]	3 000	2 918	3 022	3 273	3 135	2 979	3 247	3 415

[1] Figures for 1973-76 include some estimation because confidentiality prohibits disclosure by National Ports Council of full details. The error introduced is in the order of 1 per cent. [2] Mainly containers, also railway wagons and import/export vehicles. [3] Belgium, France, Germany, Irish Republic, Netherlands. *Source:* National Ports Council

per cent by value of all seaborne UK exports (including fuels) were carried by road and ferry.

The increasing importance of international road haulage throughout the EEC is shown in chart 1 which also compares the trends in ro-ro traffic and UK non-fuel trade. The growth in international haulage from other EEC countries has been substantial but the 50 per cent rise between 1970 and 1977 is relatively modest compared with the expansion of ro-ro traffic.

Growth of ro-ro vehicles

The rapid rise in the tonnage of goods carried was also reflected, though less strongly, in the results of the qrrs in terms of the numbers of goods vehicles on ro-ro ferries. Over 480 000 vehicles were carried to the continent in 1977, compared with 291 000 vehicles in 1973, representing an average annual increase of 13 per cent. This compares with the average annual increase in road haulage in Great Britain of only 2 per cent in terms of tonne-kilometres. The recent trends in road haulage in GB are shown in chart 2.

Over the period 1973 to 1977, through haulage emerged as the major component of international goods vehicle traffic with powered vehicles increasing their share of ro-ro traffic from 49 per cent to 57 per cent, much of this due to a sharp increase in 1977. The growth of through haulage was mainly a result of the increased activity of UK-registered powered vehicles whose share of all vehicle traffic rose from 22 per cent to 32 per cent; foreign-registered powered vehicles retained a relatively static share over the period (table 3).

The importance of routes to France, and latterly Belgium, from Kent and Suffolk ports became increasingly marked as a result of the suitability of the short sea crossings for through haulage.

Country of registration

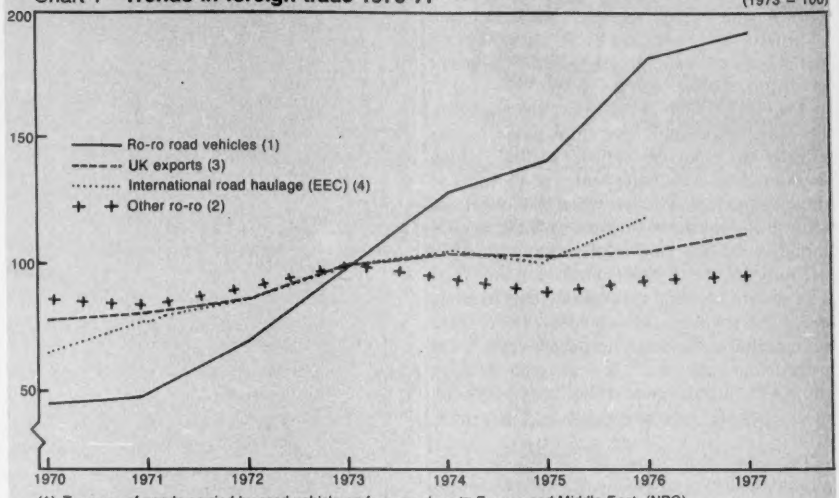
Between 1973 and 1977, the number of UK-registered powered vehicles carried by ro-ro rose by 135 per cent to nearly 155,000 or 57 per cent of all powered vehicle traffic. Foreign-registered powered vehicle traffic declined correspondingly from 55 per cent to 43 per cent despite a 50 per cent growth in absolute terms.

The bulk of foreign-registered vehicles came from EEC countries and apart from noticeable numbers from Austria, Czechoslovakia, Spain and Switzerland, vehicles from non-EEC countries accounted for inappreciable flows of traffic. Identification of smaller flows has, however, become increasingly difficult because of a five-fold increase in numbers of vehicles of unknown nationality recorded in the qrrs and the break-down given in table 4 must, therefore, be treated with caution.

Countries of disembarkation

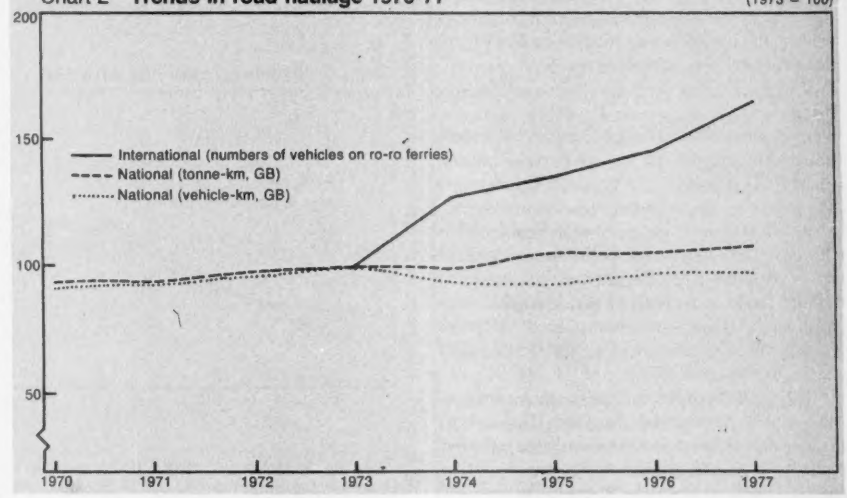
Services to France, Belgium and the Netherlands accounted for over 80 per cent of ro-ro traffic to the continent and, of these, services to France consistently attracted the largest share of traffic, which rose to 34 per cent in 1977. However, the most rapid expansion occurred in traffic to Belgian ports which more than

Chart 1 Trends in foreign trade 1970-77



(1) Tonnage of goods carried by road vehicle on ferry services to Europe and Middle East. (NPC)
(2) Tonnage of goods carried by other means (mainly container) on services as 1. (NPC)
(3) Tonnage of UK non-fuel exports to Europe and the Middle East. (NPC)
(4) Tonnage of exports of Rest of EEC (excluding Ireland) carried by road. (SOEC)

Chart 2 Trends in road haulage 1970-77



Rolling on at Harwich, bound for the Hook of Holland.

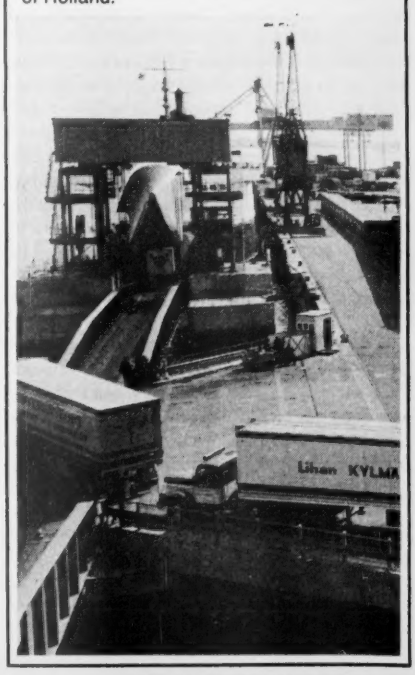


Table 2 **International road haulage traffic as a percentage of UK seaborne trade, 1977**

Percentage

	Imports		Exports		All trade	
Country area	Weight	Value	Weight	Value	Weight	Value
Non-fuels						
EEC	25.9	55.4	30.5	63.8	27.7	59.1
All Europe	15.7	47.1	23.8	53.3	18.5	49.9
All countries	8.5	30.6	15.8	32.0	10.8	31.3
All commodities						
EEC	14.5	50.6	12.3	56.0	13.5	53.0
All Europe	9.4	42.6	10.7	47.5	9.9	44.8
All countries	3.9	25.4	8.1	29.5	5.1	27.2

Source: HM Customs and Excise

Table 3 **Road vehicles carried on ro-ro ferries from Great Britain to continental Europe, 1973-77**

Thousand (percentage)

	1973	1974	1975	1976	1977
All powered vehicles	143.8 (49)	187.3 (51)	209.4 (53)	222.6 (53)	272.7 (57)
of which:					
UK registration	65.2 (22)	93.7 (25)	110.8 (28)	121.8 (29)	154.8 (32)
Foreign registration	72.7 (27)	88.2 (25)	85.6 (25)	79.7 (24)	92.4 (25)
Unknown nationality	5.9	5.3	13.1	21.1	25.4
Unaccompanied vehicles	147.2 (51)	181.1 (49)	183.7 (47)	198.8 (47)	207.7 (43)
All vehicles	291.1 (100)	368.4 (100)	393.1 (100)	421.4 (100)	480.4 (100)

doubled between 1973 and 1977. Much of the growth came in 1977 when services to Belgium increased their carryings by 36 per cent compared with 1976 and accounted for 31 per cent of all ro-ro traffic.

The importance of the short sea routes to France and Belgium was emphasised by the growth in powered vehicle traffic (which accounted for over 70 per cent of ro-ro traffic to these countries) at a time when the longer sea routes, dominated by unaccompanied vehicle traffic, saw relatively modest growth and a declining share of the overall ro-ro market. The growth of traffic to Belgium, in particular, may have reflected the advantages of a short sea crossing combined with the convenience of permit-free entry for UK-registered vehicles (unlike France where permits are required for most types of goods movements by UK vehicles).

The volume of traffic to the Netherlands rose by 49 per cent between 1973 and 1976 and then fell by 10 per cent in 1977, when for the first time it was noticeably smaller than the volume of traffic to Belgium. Traffic to other countries increased much more slowly in absolute terms; its share fell steadily from 18 per cent of the overall ro-ro market in 1973 to 13 per cent in 1977 (see table 5).

Ports

The expansion of through haulage also had noticeable effects on the pattern of traffic through the ports. The greatest impact was observed on the shortest routes across the Strait of Dover to Belgium and France from the ports of Dover and Folkestone which in 1977 accounted for 66 per cent of powered vehicle traffic and about 44 per cent of all ro-ro traffic including unaccompanied vehicles (compared with 55 per cent and 36 per cent respectively, in 1973).

Although the ports on the south coast serving routes across the English Channel to France also catered predominantly for powered vehicles (table 6), there was not the growth in traffic observed from the Kent ports.

East coast ports serving North Sea routes to Belgium, Netherlands, Germany and Scandinavia dealt largely with unaccompanied vehicles and while traffic through these ports rose substantially between 1973 and 1977 they did not, in general, see the expansion of powered vehicle traffic experienced in Dover and Folkestone. Only Felixstowe saw a comparable increase in powered vehicle traffic although, as for other east coast ro-ro ports, traffic remained predominantly unaccompanied vehicles. The combined volume of ro-ro traffic through the three most important east coast ports, Hull, Felixstowe and Harwich was substantially lower than at Dover.

Trend and seasonality

The quarterly results from the qrrs are shown in charts 3 to 5 for the period first quarter 1972 to second quarter 1978 (the figures for 1972 are not regarded as being as reliable as those for later years). A five-point moving average is also shown on each graph; this takes out the effects of seasonality as well as smoothing out some of the volatile quarterly figures in the series.

Indexes of seasonality can be calculated by dividing the observed numbers of vehicles by the equivalent moving average values as shown in table 7. Powered vehicle traffic is

Chart 3 **All vehicles on ro-ro**

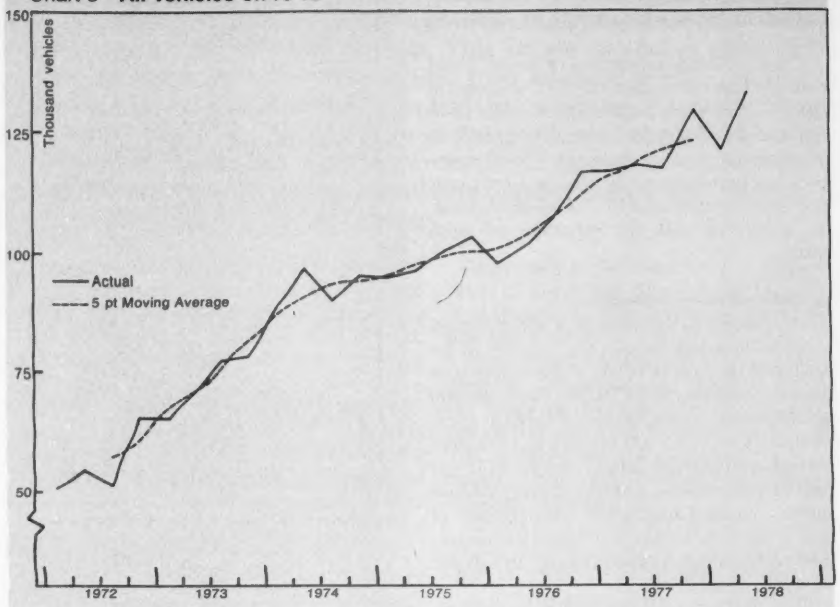


Chart 4 **Powered vehicles on ro-ro**

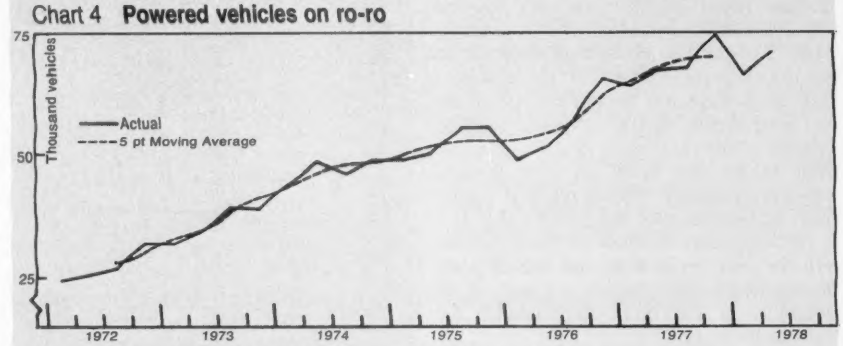


Chart 5 **Unaccompanied vehicles on ro-ro**

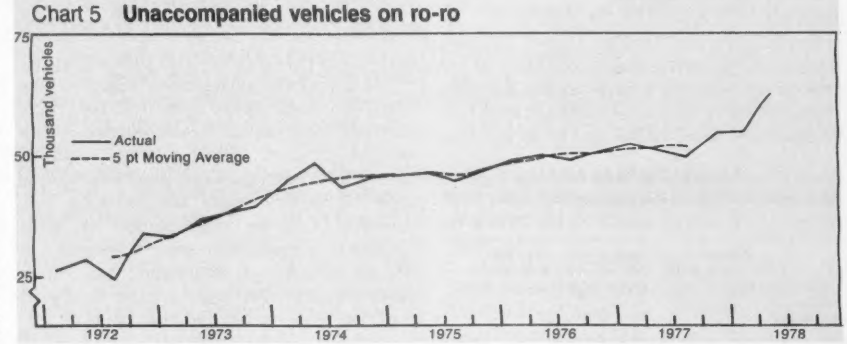


Table 7 **Seasonal variation in ro-ro traffic**

Percentage [1]

	1973	1974	1975	1976	1977	Average over period
Powered vehicles						
1st quarter	97.2	101.0	98.2	92.2	99.0	97.5
2nd	98.8	106.2	96.7	93.8	99.8	99.1
3rd	103.5	98.0	105.5	99.3	98.5	101.0
4th	95.0	100.9	106.2	106.7	107.6	103.3
Unaccompanied vehicles						
1st quarter	98.3	103.3	100.5	101.0	103.2	101.3
2nd	101.2	107.3	100.9	102.1	99.0	102.1
3rd	100.2	95.2	96.6	97.9	94.8	96.9
4th	95.7	100.7	99.9	99.9	101.5	99.5
All vehicles						
1st quarter	97.7	102.1	99.3	96.4	100.8	99.3
2nd	100.0	106.8	98.7	97.8	99.4	100.5
3rd	101.8	96.6	101.3	98.6	96.9	99.0
4th	95.3	100.8	103.2	103.6	104.9	101.6

[1] Observed divided by a five-point moving average.

Table 4 **Powered vehicles by country of registration, 1973-77** Thousand (percentage)

Country	1973	1974	1975	1976	1977
United Kingdom	65.2 (45)	93.7 (50)	110 8 (53)	121.8 (55)	154.8 (57)
Other EEC	58.4 (41)	72.7 (39)	71.1 (34)	65.7 (30)	77.0 (28)
of which:					
France	29.2 (20)	35.6 (19)	34.1 (16)	31.2 (14)	35.1 (13)
Netherlands	14.0 (10)	16.8 (9)	16.1 (8)	15.3 (7)	16.0 (6)
Belgium	6.0 (4)	7.6 (4)	8.8 (4)	6.4 (3)	9.7 (4)
Germany	3.3 (2)	4.6 (2)	4.9 (2)	4.4 (2)	5.3 (2)
Italy	1.2 (1)	1.6 (1)	2.7 (1)	3.7 (2)	4.4 (2)
Irish Republic	0.5 (—)	0.2 (—)	2.7 (1)	3.9 (2)	5.8 (2)
Denmark [1]	4.1 (3)	6.2 (3)	1.7 (1)	0.7 (—)	0.7 (—)
Non-EEC	14.4 (10)	15.6 (8)	14.5 (7)	13.9 (6)	15.4 (6)
of which:					
Austria	1.7 (1)	2.2 (1)	1.6 (1)	1.7 (1)	1.9 (1)
Czechoslovakia	1.8 (1)	2.4 (1)	2.6 (1)	3.0 (1)	3.3 (1)
Spain	4.0 (3)	4.1 (2)	3.3 (2)	3.1 (1)	3.5 (1)
Switzerland	3.7 (3)	4.0 (2)	3.6 (2)	2.8 (1)	3.1 (1)
Unidentified	5.9 (4)	5.3 (3)	13.1 (6)	21.1 (9)	25.4 (9)
All countries	143.8 (100)	187.3 (100)	209.4 (100)	222.6 (100)	272.7 (100)

[1] No breakdown is available of country of registration of vehicles on ferry routes to Denmark which has resulted in an apparent decline in the number of Danish vehicles.

Table 5 **Country of disembarkation, 1973-77** Thousand (percentage)

Country	1973	1974	1975	1976	1977
France	91.5 (31)	116.0 (31)	119.8 (30)	136.6 (32)	164.4 (34)
Belgium	71.7 (25)	93.7 (25)	108.7 (28)	109.8 (26)	149.7 (31)
Netherlands	76.6 (26)	98.7 (27)	103.9 (26)	114.1 (27)	102.7 (21)
Denmark and Germany [1]	39.7 (14)	44.3 (12)	44.4 (11)	42.7 (10)	43.1 (9)
Other [1] [2]	11.6 (4)	15.7 (4)	16.8 (4)	18.2 (4)	20.5 (4)
All countries	291.1 (100)	368.4 (100)	393.1 (100)	421.4 (100)	480.4 (100)

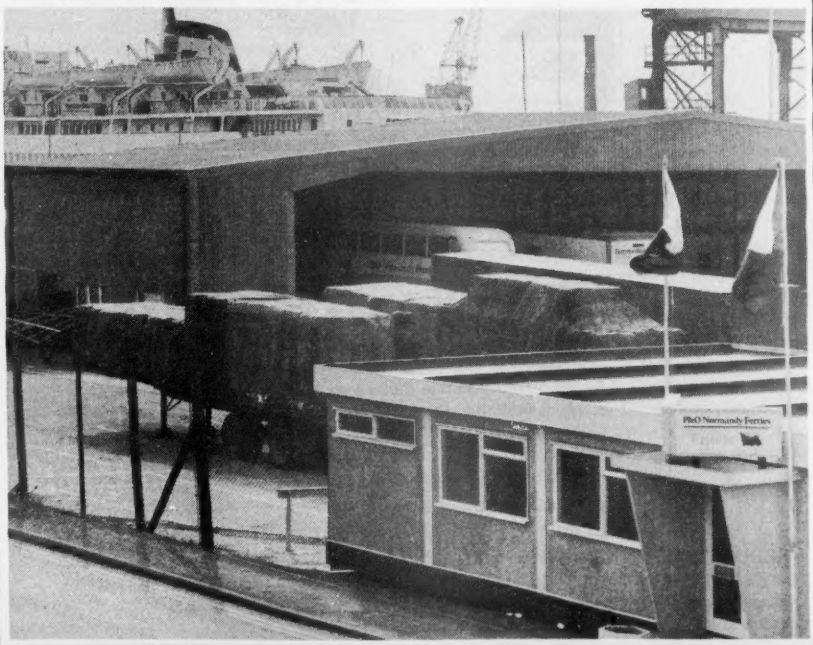
[1] For reasons of confidentiality, a finer breakdown cannot be made available. [2] Finland, Norway, Sweden, Spain and Portugal.

Table 6 **Road vehicles by port group, 1973-77** Thousand (percentage)

Port group [1]	1973	1974	1975	1976	1977
Powered vehicles					
North Sea	33.3 (23)	40.6 (22)	49.3 (24)	51.0 (23)	50.7 (19)
Strait of Dover	79.7 (55)	109.7 (59)	121.4 (58)	131.4 (59)	181.3 (66)
English Channel	30.8 (21)	37.0 (20)	38.6 (18)	40.2 (18)	40.7 (15)
All ports	143.8 (100)	187.3 (100)	209.4 (100)	222.6 (100)	272.7 (100)
Unaccompanied vehicles					
North Sea	107.2 (73)	134.0 (74)	140.3 (76)	154.7 (78)	155.2 (75)
Strait of Dover	26.3 (18)	31.4 (17)	29.1 (16)	26.6 (13)	28.7 (14)
English Channel	13.7 (9)	15.8 (9)	14.3 (8)	17.5 (9)	23.7 (11)
All ports	147.2 (100)	181.1 (100)	183.7 (100)	198.8 (100)	207.7 (100)
All vehicles					
North Sea	140.6 (48)	174.6 (47)	189.7 (48)	205.7 (49)	205.9 (48)
Strait of Dover	105.9 (36)	141.0 (38)	150.5 (38)	158.0 (37)	210.1 (44)
English Channel	44.6 (15)	52.8 (14)	52.9 (13)	57.7 (14)	64.4 (13)
All ports	291.0 (100)	368.4 (100)	393.1 (100)	421.4 (100)	480.4 (100)

[1] North Sea: all ports on east coast from Thames estuary northwards; Strait of Dover: Dover, Folkestone, Ramsgate; English Channel: all ports on south coast, west of Folkestone.

Freight for Normandy waiting at Southampton.



Ro-ro revolution

relatively low in the first quarter increasing to higher volumes in the last quarter. On the other hand, unaccompanied vehicle traffic is relatively low in the second half of the year particularly between July and September. However the seasonality, if it exists, is weak and disappears when ro-ro traffic is considered in total.

Aside from the massive and fairly steady growth in ro-ro traffic overall, the most noticeable features have been:

☐ the substantial increase in ro-ro traffic during second quarter of 1974 shown in charts 3 to 5 and which appears from table 7 to have been atypically high for the quarter. Although other published trade information gives no obvious clue to the reasons for the high volume of ro-ro traffic in this quarter, it is noticeable that it came during a period when UK trade patterns were changing as a result of UK entry to the EEC and when ro-ro was expanding very rapidly. The succeeding, relatively low volumes of traffic in the second half of 1974 and the slow down in ro-ro growth which began about this time may have reflected the worsening of the economic recession in Europe. This slow down would have had the effect of giving this quarter an artificially high index of seasonality.

☐ the slow down between the fourth quarter of 1974 and the first quarter of 1976 which coincided with the worst of the economic recession. Although this introduced a suggestion of a cyclical movement, it is more likely that there was a fairly steady underlying growth, affected by the recession in 1975 but re-emerging towards the end of 1976. The recession, brought on by the fuel crisis of 1973,

Developments in official statistics in 1979

The quarterly ro-ro survey has been carried out since 1971 as a voluntary survey and throughout its existence full co-operation has been given by ferry operators. At the end of 1978, the survey was included in a government-wide review of forms sent to industry and it was decided to simplify the questionnaire in order to reduce the burden on respondents. The simplified questionnaire will require information only on traffic leaving Great Britain and will be introduced during 1979. This will lead to a minimal loss of information since in terms of numbers of vehicles there is little difference between inward and outward traffic.

A new survey of international road haulage is also being introduced during 1979, initially for a period of one year. This is in response to the requirements of EEC directive 78/546, 12 June 1978, and will provide information on the activities of UK hauliers abroad in terms of the tonnage of goods carried and tonne-kilometres performed, distinguishing commodity types and the countries served.

biozyme LABORATORIES LIMITED GREAT BRITAIN

Unit 6, Gilchrist-Thomas Estate,
Blaenavon, Gwent NP4 9RL,
South Wales, Great Britain
Telephone: Blaenavon 790678
(STD Code 0495)
Telegrams: Biozyme, Blaenavon
Telex: 497731

ENZYMES
and related biochemicals
for use in DIAGNOSTIC
and PHARMACEUTICAL Industries

are honoured to receive the 1979 Queen's Award for Export Achievement

BIOZYME LABORATORIES LTD

Froude

1976 1979

During the past three years, since being awarded the Queen's Award for Technology, Froude Engineering Limited have nearly doubled their exports. This great effort has resulted in them being awarded the 1979 Queen's Award for Export Achievment.

Froude now penetrate deep into the world's engine testing markets, providing the high technological skills and equipment essential to the world's progress. The middle and far eastern markets, the EEC and North America represent major sales outlets for Froude and, more recently they have broken into Eastern Europe, Africa, South America and the Eastern Block countries. In fact wherever engines are tested throughout the world the name of Froude Engineering Limited, carries the highest degree of respect.

Froude's involvement in engine testing technology is complete, in automotive, marine, aviation and general industry throughout the world. And today, their range is second to none, this coupled with their expertise and the fact that Froude Engineering Limited, meet the strict conditions specified by the Ministry of Defence Standard 05-21 makes Froude world leaders in total test plant technology.

FROUDE ENGINEERING LIMITED
Gregory's Bank, Worcester WR3 8AD, England.
Telephone: 0905 27166 Telex: 339637

had severe effects on freight transport in Europe which substantially declined in the first half of 1975. Railways and waterways were worst affected but the growth in road haulage was also considerably reduced. As in chart 1, international road haulage from the seven continental EEC countries actually declined (by 2 per cent) in 1975.

☐ a large increase in unaccompanied vehicle traffic in the first half of 1978. Although 1976 and to a greater extent 1977 were marked by the rise of powered vehicle traffic, results for the 12 months to June 1978 suggest that the growth of this traffic has slackened and that unaccompanied vehicle traffic has begun to rise more noticeably. There is, however, an indication, noted above, that unaccompanied vehicle traffic is relatively low towards the end of the year when powered vehicle traffic is relatively high. If this pattern is reflected in the results for the second half of 1978, the apparent reversal of recent trends observed in the first half of 1978 will be less noticeable over the year as a whole.

☐ the indications of some seasonality in powered vehicle traffic. Although, as noted above, the evidence of seasonality is generally weak, the indices for the fourth quarter for powered vehicle traffic have been distinctly high for 1975-1977 and they do suggest a developing seasonal pattern with powered vehicle traffic noticeably higher in the last three months of the year.

ro-ro revolution

Position of importance

International road haulage using ro-ro ferries has developed over the last 10 years to a position of considerable importance in the context of UK trade with Europe. The quarterly roll-on/roll-off survey has monitored this development since 1971 and has highlighted some of the main characteristics of this expanding transport market, including a considerably greater average annual growth rate than domestic road haulage in Great Britain; a greater average annual growth rate than observed in international road haulage from the continental countries of the EEC; the major importance of ferry routes between Dover and Folkestone and France and Belgium, particularly for the carriage of powered vehicles; the sharp increase in powered vehicle traffic, particularly UK-registered vehicles, during 1977; although there is some evidence of the subsequent revival of the relative importance of unaccompanied vehicle traffic during 1978.

Inquiries: Department of Transport Statistics Transport and General Division, Room S12/07, 2 Marsham Street, London SW1P 3EB, tel. 01-212 8323.

Overseas trade export services

Agricultural export centre to be opened

A new facility for agricultural exporters will be opened in September at the National Agricultural Centre, headquarters of the Royal Agricultural Society of England. The international pavilion, currently used for the four days of the royal show as a hospitality and information centre for overseas visitors, is to be developed as an international reception centre, operating all year round.

The aim of the new centre will be to provide a central point from which overseas visitors can obtain information on all aspects of British agriculture.

Part of the pavilion will be used for displays by some agricultural organisations and in addition there will be a large exhibition where individual companies can promote their products and services.

The centre will be run by a qualified agronomist with an all-round knowledge of the industry and able to speak several languages. His support staff will also have one or more foreign languages.

Further information: circle 431

Astran resumes Afghanistan service

Astran has resumed overland services to Afghanistan following easing of the internal situation.

According to Astran the situation inside the country is still sensitive but border and customs clearance are now functioning well enough to resume services. Initially only full loads will be carried but the company plans to re-introduce its regular trailer groupage services shortly.

Further information: circle 432

Seatrain offers alternative all-water route to US Gulf

Seatrain UK will be starting a direct all-water route service to the US Gulf port of Galveston, Texas, towards the end of May. This new service will be in addition to the company's existing mini-bridge service to the Gulf.

Seatrain emphasises that this new service will not alter Seatrain's commitment to the mini-bridge but will also give added flexibility in the types of cargo that it will be able to handle. Seatrain intends to expand its new service by adding a third vessel as well as a service to other Gulf ports to provide a 12-day frequency in the near future.

The first vessel – the *Seatrain Galveston* – with a capacity of 610 trailer equivalent units will sail from the European ports of Le Havre, Rotterdam, Bremerhaven and Greenock on 23 May, direct to the port of Galveston.

Further information: circle 433

Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

New budget rate service started by Meadows

Meadows Air Charter has introduced a new 'budget rate service' which, the company says, offers substantial savings on current airline rates.

Over 100 major cities are served by this new service which can offer reductions of up to 75 per cent on some destinations.

Transit times may be slower than those offered on scheduled IATA services and Meadows Airfreight consolidation services – but MACL in return ensures a keen rate for exporters able to wait that little longer.

In general terms a minimum of 45 kg or higher is applicable to many destinations – but MACL will supply a current quotation.

Further information: circle 434

Brantfords begins Ruhr service

In addition to its regular groupage services to Europe and Scandinavia from both London and provincial centres, Brantford International has begun a new weekly trailer groupage service from Manchester to serve the Ruhr area of western Germany through Hagen.

Fast turn-round

Brantford's recent move to Trafford Park gives a fast turn-round of local and international vehicles and a continuous receiving facility. In Germany, in addition to the major Ruhr area served, Brantford's partner can cover other industrial centres of western Germany, either through its own distribution arrangements or, for larger part loads, by direct trailer delivery.

Further information: circle 435

Overseas trade exhibitions

Striking British successes at Basle's clock show

From Miss S. Parkes, British consulate-general, Basle

Although total attendance was lower than last year, registered trade buyers were up by 18 per cent at the seventh European watch, clock and jewellery fair held in Basle from 21 April to 1 May.

The fair takes place annually in conjunction with the Swiss industries fair – a traditional exhibition consisting of various types of consumer goods, household and garden equipment.

The number of paying visitors reached a total of 440 883 in addition to the many who received complimentary tickets. This figure is however 3 per cent lower than for 1978.

In the watch, clock and jewellery fair there were about 1500 exhibitors from 16 European countries, including Norway and Greece for the first time. There was a strong contingent of 59 British companies, taking part in a joint venture sponsored by the Export Council for Jewellery and Giftware, and the British Clock and Watch Manufacturer's Association, and supported by the British Overseas Trade Board.

Visitors to the joint-venture stands showed particular interest as usual in the hand-crafted, high-quality reproduction clocks. These products are expensive but buyers know that they are produced with the care, accuracy and attention to detail which was lavished on the original works. There was much activity on the ordinary domestic clock scene. Success in this field is attributed to the superior quality and competitive prices of the British factory-made product.

In the jewellery section, British exhibitors demonstrated their creativity and craftsmanship in both the modern and more conventional designs of fine, semi-precious and costume jewellery, silver and other giftware. Exhibitors reported that business was slower than usual but substantial orders were taken particularly in the medium to high-quality products.

The foreign exhibitors included over 250 West German firms and groups from Spain, Italy and France. Statements from the British exhibitors and from the trade associations representing other foreign groups suggested that trade buyers from western Europe were in the majority, with quite a high percentage from the United States, Canada, Australia and South Africa.

The British exhibitors were generally satisfied with the results of the fair. Despite the fact that there were fewer visitors to the stands, the number of registered trade buyers was up by 18 per cent. Orders were placed on the jewellery side to the value of £500,000, with prospects of up to £3 million of further business. For the clock and watch manufacturers, orders taken were in the region of £964,000 with inquiries that are expected to yield at least £2,042,000 further business. Exhibitors agreed that this fair represents a unique opportunity to present their goods to the world and if present trends continue prospects for these industries over the next few years should be bright.

Top quality visitors at Mecom

From L. E. Walker, British embassy, Bahrain

Twenty-seven British companies took part in the joint venture sponsored by the Electronic Engineering Association at the first Middle East electronic communications show (Mecom) held in Bahrain from 23 to 26 April.

In addition to the joint-venture group 11 other British companies took part, including the British Post Office (whose Prestel viewdata service attracted great attention), Plessey, Cable and Wireless, and International Aeradio, making the British group the largest national contingent at the show.

The exhibition, which attracted 140 exhibitors from 16 countries, was opened by the Prime Minister of Bahrain, Sheik Khalifa bin Sulman Al Khalifa, who toured the exhibition stands accompanied by the Bahraini minister of communications and the Saudi and Omani ministers of posts, telegraphs and telecommunications (PTTs).

A comprehensive range of telephone, telegraph, radio and other communications and telecommunications equipment was on display and most of the giants of the British communications industry took part as well as a number of well-known names from the United States, West Germany, France and Italy.

Although some exhibitors expressed disappointment at the number of trade visitors, most felt that the quality of the visitors was high, with senior officials and officers attending from Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, and Iraq, representing ministries of communications, PTT and the interior, and the armed forces.

As was to be expected, this was not the sort of exhibition where companies reckoned on receiving significant orders, but was rather a shop-window to provide an opportunity to develop existing contacts and to establish new ones.

Most exhibitors felt that participation in Mecom '79 had served this purpose and went away determined to follow up their contacts and to turn them into hard business over the coming months.

UK companies which felt particularly encouraged at the prospects included GEC, Racal and STC.

British tv material sold worldwide

From Jo Patanchon, British Consulate-general, Marseilles

Held at the Palais des Festivals, Cannes, from 20 to 26 April, the fifteenth international television programme market (MIP-tv) attracted 863 companies and some 3000 trade delegates from 104 countries. With 68 exhibitors with stands, the UK was the second largest participant, behind France but followed by the United States with 85 and 44 stands respectively. Of the UK delegation, 28 television companies were sponsored by the British Film Producers Association in collaboration with the British Overseas Trade Board.

British producers and distributors of television material have always done good business in Cannes. This year was no exception. Among the exhibitors who did well were: Rank Film Distributors, which sold feature films to the television networks of Poland, Czecho-

Bahrain's Prime Minister Sheik Khalifa bin Sulman Al Khalifa, touring the British exhibits after opening Mecom '79.

Commercial representation guide

British commercial representation overseas May 1979

Before you go abroad . . .

Commercial departments of the British embassies, high commission offices and consulates listed in this guide can be of considerable help to the British business visitor travelling abroad on export business. They can assist him with introductions, advice on local conditions and help generally in achieving the purpose of his visit. But they are better able to help if told in advance about the visit, its purpose and the nature of any assistance likely to be required of them. Such advance notification to commercial departments is best sent through one of the offices listed in the adjacent column and intending business travellers are advised to contact the nearest of these offices at an early stage in arranging visits abroad. These offices will not only notify the visits to the commercial departments concerned but can also provide travellers with information about overseas markets before departure.
On arrival overseas the business traveller is advised to telephone the commercial department to fix an appointment with the appropriate commercial officer.

'Hints to exporters'

This series of booklets is gradually replacing Hints to Businessmen as each edition in that series is revised. Booklets are available for most countries listed and cost £1 each. British exporters may buy copies over the counter at any of the offices listed in the adjacent column, or at Export House. Booklets may also be ordered by post, accompanied by the correct remittance, from any of these points or direct from Department of Trade, Publications Sales Unit, Export House, 50 Ludgate Hill, London EC4M 7HU. For orders by post please add postage/packing charge of 20p for one copy, 30p for 2–4 copies, and 40p for 5–7 copies. Orders for more than 7 are sent post free. A subscription service is also available.

Poste restante and telex facilities

Businessmen visiting overseas markets may, if they wish, have their mail addressed care of the commercial department of the British embassy/high commission/consulate in the country they are visiting. This facility is available during normal business hours only and business men intending to use it are requested to give adequate notice to the overseas commercial department beforehand, or alternatively advise one of the offices listed in this column. Where public telex facilities are not freely available, commercial departments will, if possible, allow visiting businessmen who wish urgently to get in touch with their firms to use the post's telex facilities on a repayment basis.

Initial inquiries

The information in this list is for the benefit of exporters travelling abroad. All commercial inquiries about overseas countries should be addressed to the nearest office of the British Overseas Trade Board (BOTB) – see list of addresses below – where a great deal of information is already on record and can be supplied immediately. The commercial departments of British embassies, consulates etc are under instruction to refer back to the BOTB any direct inquiries which its offices can handle in the first instance.

Offices providing services for UK exporters

British Overseas Trade Board

Export services and Promotions Division Department of Trade
Export House, 50 Ludgate Hill, London EC4M 7HU.
Tel. 01-248 5757, telex 886143 DTI EXPORT LDN

Export sections of Department of Industry regional offices

Yorkshire and Humberside Regional Office
Priestley House, 1 Park Row, Leeds LS1 5LF.
Tel. 0532 443171, telex 557925 DTI Leeds

Northern Regional Office
Stanegate House, 2 Groat Market, Newcastle upon Tyne NE1 1Yn. Tel. 0632 24722, telex 53178 DTI NTYNE

Cumbria District office
Town Hall, Cockermouth, Cumbria CA13 9NP.
Tel. 0900 823498, telex 64173 DTI COCKERMOUTH

North-Western Regional Office
Sunley Building, Piccadilly Plaza, Manchester M1 4BA.
Tel. 061-236 2171, telex 667104 DTI MCHR

West-Midland Regional Office
Ladywood House, Stephenson Street, Birmingham B2 4DT.
Tel. 021-632 4111, telex 337021 DTI BHAM

East-Midlands Regional Office
Severns House, 20 Middle-Pavement, Nottingham NG1 7DW.
Tel. 0602 56181, telex 37143 DTI NOTG

South-Western Regional Office
The Pitney, Bristol BS1 2PB. Tel. 0272 291071, telex 44214 DTI BRISTOL

Northern Ireland

Northern Ireland Department of Commerce
Chichester House, 64 Chichester Street, Belfast BT1 4JX.
Tel. 0232 34488, telex 747025 GOVCOMM BELFAST

Scotland

Export Office for Scotland
Scottish Economic Planning Department
Alhambra House, 45 Waterloo Street, Glasgow G2 6AT.
Tel. 041-248 2855, telex 77583 SEPD GLASGOW

Wales

Welsh Office Industry Department
Government Buildings, Gabalfa, Cardiff CF4 4YL. Tel. 0222 62131, telex 49267 WOCARD G

This guide is prepared for the British Overseas Trade Board by the Department of Trade's Export Services and Promotions Division and published half-yearly by 'Trade and Industry'. Inquiries about the list should be made to British Overseas Trade Board, Export Services and Promotions Division, Department of Trade, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 ext. 7406 or 211.

Afghanistan
British Embassy, Karte Parwan, **Kabul.** Tel. 30511/3.

Algeria
British Embassy, Residence Cassiopee, Batiment B, 7, Chemin des Glycines, **Algiers** (postal address BP43, Alger Gare. Tel. 605601/605411, 605038, 605831, telex 52872 (a/b PRODROME ALGER).

Angola
British Embassy, Rua Biogo, Cao, 4 Luanda, CP1244. Tel. 34582/3. telex 3130 (a/b BRILDA AN).

Argentina
British Embassy, Luis Agote 2412/52, **Buenos Aires** (postal address Casilla de Correo 2050, Buenos Aires). Tel 824-70711/9 (11 lines), telex 121666 (a/b 121666 ARPROBA).

Australia
British High Commission, Commonwealth Avenue, **Canberra, ACT 2600.** Tel 730422, telex AA62222 (a/b UKREP AA62222).
Sydney British Consulate-General, Gold Fields House, Sydney Cover, Sydney, Australia 2000, NSW. Tel 27-7521, telex 71 20680 (a/b BRITN AA20680).
Melbourne British Consulate-General, The Colonial Mutual Life Building, 330 Collins Street, Melbourne, Victoria, Australia 3000. Tel. 602–1877, telex 71 30660 (a/b BRITN AA30660).
Brisbane British Consulate-General, BP North House, 193 North Quay, Brisbane, Queensland, Australia 4000. Tel 2214933 (STD area code 07), telex 7140556 (a/b BRITN AA40556).
Perth British Consulate-General, Prudential Building, 95 St George's Terrace, Perth, Western Australia 6000. Tel 3215611 and 217891, telex 71 92493 (a/b BRITN 71 92493).
Adelaide British Consulate-General, 8th Floor, 70 Pirie Street, Adelaide, South Australia, 5000. Tel 2234572, telex 82543 (a/b BRITN AA82543).

Austria British Embassy, Reisnerstrasse 40, A-1030 **Vienna** 3. Tel 731575/9, telex 133410 (a/b 133410 BRITEM A), 132810 (a/b 132810 BRITE, M

Bahamas
British High Commission, Bitco Building, Third Floor, East Street, **Nassau** (postal address PO Box N 7516, Nassau). Tel 57471/4 area code 80932, telex 20112 (a/b UKREP, Nassau).

Bahrain
British Embassy, PO Box 114 Government Road, North Manama, **Bahrain.** Tel. 254002 (seven lines), telex 8213 (a/b 8213 PRODRO BN).

Bangladesh
British High Commission, DIT Building Annexe, Dilkhusha (PO Box 90), **Dacca**-2. Tel 243251-3, 244216-8, 246867.

Barbados
British High Commission, 147/9 Rosebuck Street (PO Box 676c), **Bridgetown.** Tel 63525, telex WB219 (a/b UKREP, BRI WB 219).

Belgium
British Embassy, Britannia House, Rue Joseph II 28, 1040 **Brussels.** Tel 2191165, telex 22703 (a/b BRITEM B).
Antwerp British Consulate-General, Antwerp Tower (16th floor) 1/5 De Keyzerlei, Box 14, 2000 Antwerp. Tel 326940.
Brussels is the main commercial post and central point for British trade promotion work in Belgium.

Benin
There is no resident mission in Benin. British commercial interests are the responsibility of the British high commission in Lagos, Nigeria.

Bermuda
British commercial interests are the responsibility of the British trade development office, New York.

Bolivia
British Embassy, Avenida Acre 2732-2754 (Casilla 694). **La Paz.** Tel 51400 and 29404, telex BX 5228 (a/b PRODROME BX 5228).

Botswana
British High Commission, Private Bag 23, **Gaborone.** Tel 2483/5, telex JX 7870 (a/b HIGHCOM J7870).

Brazil
British Embassy, Avenida das Nacoes, Lote 8, BRASILIA DF (Postal address: Caixa Postal 07-0586 BRASILIA DF). Tel Brasilia 25 2710, 25 2625, 25 2985, 25 2745, telex (061) 1360 (a/b 611360 EING BR).
Rio de Janeiro British Consulate-General, Praia do Flamengo 284-2° andar Rio de Janeiro GB (Caixa Postal 669-ZC-00). Tel. 225-7252, telex 02121577 (a/b 2121577 EING BR).
Sao Paulo British Consulate-General, Avenida Paulista 1938-17° andar, 01310, Sao Paulo (Caixa

Postal 846) Sao Paulo, SP. Tel. 287-7722, telex 011-21384 (a/b 1121384 BRIT).

Brunei
British High Commission, Room 45, 5th Floor, Hong Kong Bank Chambers, Jalan Chevalier, **Bandar Seri Begawan,** Brunei. Tel. 6001 and 6661, telex BRU 211 (a/b BRU 211).

Bulgaria
British Embassy, Boulevard Marshal Tolbukhin 65-67, **Sofia.** Tel. 885361/2, telex 22363 (a/b PRODROME SOFIA).

Burma
British Embassy, 80 Strand Road (PO Box 638), **Rangoon.** Tel. 15700.

Burundi
There is no resident mission in Burundi. British commercial interests are the responsibility of the British embassy, Kinshasa, Zaire.

Cameroon
British Consulate, Boite Postale 1016, Rue Pau, Douala, Cameroon. Tel. 42 21 77 and 42 22 45, telex 5353 (a/b BRITAIN 5353 KN).

Canada
British High Commission, 80 Elgin Street, **Ottawa K1P 5K7,** Ontario. Tel. 237-1530, telex 0533318 (a/b UKREP OTT).
Montreal British Consulate-General, 635 Dorchester Boulevard West, Montreal H3B 1R6. Tel. 866-5863, telex 055-61224 (a/b BRITAIN, MTL).
Toronto British Consulate-General, 8th Floor, 200 University Avenue, Toronto, Ontario M5H 3E3. Tel. 593-1290, telex 065-24486 (a/b BRITAIN, TOR).
Vancouver British Consulate-General, 4th Floor, Bank of Nova Scotia Building, 602 West Hastings Street, Vancouver BC V6B 1P6, British Columbia. Tel. 683-4421, telex 04-51287 (a/b BRITAIN, VCR).
Halifax British Consulate, 10th Floor, Centennial Building, 1645 Granville Street, Halifax, Nova Scotia B3J 1X3. Tel. 422-7488, telex 019-21634 (a/b BRITAIN, HFX).
Edmonton British Consulate-General, Suite 1404, Three McCauley Plaza, 10025 Jasper Avenue, Edmonton, Alberta T5J 1S6. Tel. 428-0375, telex 037-2421 (a/b BRITAIN, EDM).
Winnipeg British Government Trade Office, York Centre, Suite 245-175, Hargrave Street, Winnipeg, Manitoba R3C 3R8. Tel. 942-3151, telex 075-7814 (a/b BRITRAD WPG).

Cape Verde
There is no resident mission in Cape Verde. British commercial interests are the responsibility of the British embassy in Dakar, Senegal.

Central African Empire
There is no resident mission in the Central African Empire. British commercial interests are the responsibility of the British consulate, Douala, Cameroon.

Chad
There is no resident mission in Chad: the British ambassador resides at London (the Foreign and Commonwealth office). Commercial inquiries should be addressed in the first instance to Commercial Relations and Exports Division, Department of Trade, 1 Victoria Street, London SW1H 0ET. Tel. 01-215 5334.

Chile
British Embassy, La Concepcion 177 Providencia (Postal address: Casilla 72-D), **Santiago.** Tel. 239166, telex 40072 (a/b 40072 PROST CL).

China
British Embassy, 11 Guang Hua Lu, Jian Guo Men Wai, Beijing (Peking). Tel. 51-196115 (five lines), telex 22191 (a/b 22191 PRDRM CN).

Colombia
British Embassy, Calle 38, 13-35 Pisos 9-11, **Bogota.** (*Airmail address:* Apartado Aereo 4508, Bogota.) Tel. 269 81 00, telex 44503 (a/b BRIT CO).

Congo
There is no resident mission in Congo. British commercial interests are the responsibility of the British embassy in Kinshasa, Zaire.

Costa Rica
British Embassy, Thunovsk ulice 14, Mala Strana 10056, **San Jose.** Tel. 21-55-88, telex 2169 (a/b 2169 PRODROM).

Cuba
British Embassy, Edificio Bolivar, Capdevila, 101-103, e Morro y Prado, **Havana.** Tel. 61-5681 (postal address: c/o Apartado 528, Administracion do Correos No. 1 Mexico 1, DF Mexico). Telex 511656 UKEMB CU.

Cyprus
British High Commission, Alexander Pallis Street, PO Box 1978, **Nicosia.** Tel. 73131/5, telex 2208 (a/b UKREPNIC).

Czechoslovakia
British Embassy, Thunovska Ulice 14, Mala Strana 118 00, **Prague 1.** Tel. 533347/9, 533340 and 533370, telex 121011 (a/b 121011 PRDM C).

Denmark
British Embassy, 36-40 Kastelsvej, DK-2100, **Copenhagen Ø.** Tel. (01) 26 46 00, telex 19908 (a/b 19908 BRIEMB DK).
There is also an honorary consul in the Faroe Islands *at Torshavn who sees British business visitors.* British Consulate, Yviri vid Strand 17 (PO Box 49) DK-3800, Torshavn, Faroe Islands. Tel. Bryggjan 13510, telex 81258 (a/b MARRCO FA).

Dominican Republic
British Embassy, 506 Avenida Independencia (Apartado 1352), **Santo Domingo.** Tel. 682-3128/9, telex 2020075 (a/b PRODROME 3460075).

Ecuador
British Embassy (opposite Hotel Quito), Gonzalez Suarez 197, **Quito** (postal address: Casilla 314, Quito). Tel. 230070/3, telex 308-02-2138, direct dialling (a/b 2138 PRODQT ED).

Equatorial Guinea
There is no resident mission in Equatorial Guinea. British commercial interests are the responsibility of the British consulate in Douala, Cameroon.

Egypt
British Embassy, Ahmed Raghab Street, Garden City, **Cairo.** Tel. 20850/9.
Alexandria British Consulate-General, 2 Rue Mina, Roushdy, Alexandria. Tel. 47166.

El Salvador
British Embassy, 13a Avenida Norte (Bis), No. 611, Colonia Duenas, **San Salvador.** (Postal address: Embajada Britanica, Apartado (cc) 2350, San Salvador, El Salvador, Central America.) Tel. 219106, 220590, 223945, telex 20133 (a/b PRODSALV).

Ethiopia
British Embassy, Papassinos Building, Ras Desta Damtew Avenue, PO Box 858, **Addis Ababa.** Tel. 15166 and 151252/3.

Fiji
British High Commission, Civic Centre, Stinson Parade (PO Box 1355), **Suva** (UKREP SUVA). Tel. 311033, telex FJ 2129 (a/b UKREP FJ 2129).

Finland
British Embassy, Undenmaankatu 16-20, **Helsinki 12.** Tel. 647922, telex 12122 (a/b UKHKI SF).

France
British Embassy, 35 Rue du Faubourg St Honore, **75008 Paris.** Tel. 266-91-42, telex 650264 (a/b INFORM PARIS).
Bordeaux British Consulate-General, 15 Cours de Verdun, 33081 Bordeaux. Tel. 52-28-35/6, telex 570440 (a/b BRITAIN BORDX).
Lille British Consulate-General, 11 Square Dutilleul, 59800 Lille. Tel. 52-87-90, telex 820669 (a/b 820669 BRITAIN LILLE).
Lyon British Consulate-General, 24 Rue Childebert, 69 288 Lyon Cddex 1, Rhone. Tel. 375967/8, telex 8022-330254 (a/b BRITAIN LYON).
Marseilles British Consulate-General, 24 Avenue du Prado, 13006 Marseilles 6e (Bouches du Rhonee). Tel. (91) 534332, telex 420307 (a/b BRITAIN MARSL).
Strasbourg British Consulate-General, 10 Rue du General de Castelnau, 67001 Strasbourg Cedex. Tel. 88-366491, telex 870995 (a/b BRISTRA STRBG).

Gabon
British Embassy, Batiment Sogame, Boulevard de l'Independence , BP 476, Libreville. tel. 72 29 85, telex 5538 (a/b PRODROM GO).

Gambia, The
British High Commission, 48 Atlantic Road, Fajara, Banjul. Tel. Serrekunda 2133, 2134, 2578, 2672.

German Democratic Republic
British Embassy, **East Berlin,** BFPO 45.

German, Federal Republic of
British Embassy, 5300 **Bonn,** Friedrich-Ebert Allee 77. Tel. 234061, telex 886887, 8869561 (a/b BRINF-D).
Berlin British Consulate-General, Berlin 1000 12, Uhlandstrasse 7/8. Tel. 3095295, telex 184268 (a/b UKBLN D).
Dusseldorf British Consulate-General, 4000 Dusseldorf 30, Nordsternhaus, Georg-Glock-Strasse 14. Tel. 434281-5, telex 8584855 (a/b 8584555 COM D).
Frankfurt British Consulate-General, 6 Frankfurt/Main, Bockenheimer Landstrasse 51-53. Tel. 720406, telex 414932 (a/b UKFFT D).
Hamburg British Consulate-General, 2 Hamburg 13, Harvestehunderweg 8a. Tel. 446071/5, telex 213562 (a/b BRHBG).
Hanover British Consulate-General, D3000 Hanover 1, Uhlemeyer Strasse 9 and 11. Tel. 327641, telex 923263 (a/b BCGHN O).
Munich British Consulate-General, 8 Munich 40, Amalienstrasse 62. Tel. 394015/9, telex 529959 (a/b UKMUN D).
Stuttgart British Consulate-General, 7 Stuttgart 1, Kriegsbergstrasse 28. Tel. 293216/8, telex 722397 (a/b 722397 UKST D).

Ghana
British High Commission, Barclays Bank Building, High Street (PO Box 296), **Accra.** Tel. 64123 and 64134. The PO Box number must be used for all correspondence.

Greece
British Embassy, 1 Ploutarchou Street, **Athens** 139. Tel. 736211 (10 lines), telex 216440 (a/b 216440 LION GR).

Guatemala
British Consulate, Edificio Maya, Via 5, No. 4-50, 8° Piso, Zona 4. **Guatemala City.** Tel. 61329 and 64375, telex 5279 (a/b 5279 BRITON GU).

Guinea
There is no resident mission in Guinea. British commercial interests are the responsibility of the British embassy in Dakar, Senegal.

Guinea-Bissau
There is no resident mission in Guinea-Bissau. British commercial interests are the responsibility of the British Embassy in Dakar, Senegal.

Guyana
British High Commission, 44 Main Street (PO Box 625), **Georgetown.** Tel. 65881/4, telex GY221 (a/b 221 UKREP GY).

Haiti
There is no resident mission in Haiti. British commercial interests are the responsibility of the British high commission in Kingston, Jamaica.
There is a part-time British vice consul in Port-au-Prince, Haiti, who sees British business visitors: 21 Avenue Marie-Jeanne, Cite de l'Exposition, PO Box 1302, Port-au-Prince. Tel 2-1227 and 2-2225, telex TT 3490259).

Honduras
British Embassy, 3rd Floor, Edificio Palic, Apartado 123, **Tegucigalpa.** Tel. 32-5480, 32-5429, telex 1234 (a/b PRODROME HT). If unavailable, call: 1231 (a/b FORCA HT).

Hong Kong
British Trade Commission, PO Box 528, 9th Floor, Gammon House, 12 Harcourt Road, **Hong Kong.** ('Uktrade, Hong Kong'.) Tel. 5-229541, telex HX 73031 (a/b UKTRA HX).

Hungary
British Embassy, Harmincad Utca 6, **Budapest V.** Tel. 182-888, telex 224527 (a/b 224527 BRIT H).

Iceland
British Embassy, Laufasvegur 49, **Reykjavik.** Tel. 15883/4, telex 2037 (a/b 2037 UKREYK IS).

India
British High Commission in India, Chanakyapuri, **New Delhi,** 110021. Tel. 690371, telex 2135 (a/b UKREP ND 2135).
Calcutta British Deputy High Commission, 1 Ho Chi Minh Sarani, PO Box 9073, Calcutta 700016. Tel. 44-5171.
Bombay British Deputy High Commission, PO Box 815, Mercantile Bank Buildings, Mahatma Gandhi Road, Bombay 400023. Tel. 274874, telex 011-2850 (a/b 112850 BHC IN).
Madras British Deputy High Commission, PO Box 3710, 150A Anna Salai, Madras, 2-600002. Tel. 83136, telex 41 7169 (a/b 417169 UKMS IN).

Indonesia
British Embassy, Jalan Thamrim 75, **Jakarta.** Tel. 341091/8, telex 46166 (a/b DKT 46166 PRODROME IA).

Iran
British Embassy, Avenue Ferdowsi (PO Box 1513), **Tehran.** Tel. 375011 (10 lines), telex 212493 (a/b 212493 PROD IR).

Iraq
British Embassy, Shaheen Building, Kard Al-Pasha Sa'adoon Street, **Baghdad.** Tel. 99001/3.

Ireland, Republic of
British Embassy, 33 Merion Road, **Dublin 4.** Tel. 695211, telex 5296 UKDBEI.

Israel
British Embassy, 192 Hayarkon Street, **Tel Aviv** 63405. Tel. (03) 249171-8, telex 33559 (a/b PRODR IL).

Italy
British Embassy, Via XX Settembre 80A, 1 00187, **Rome.** Tel. 4755551-5, telex 8023-610049 (a/b 610049 UKEMB I).
Milan British Consulate-General, Via San Paolo 7, 1-20121 Milan. Tel. 803442-6, telex 8023-310528 (a/b 310528 UKCON).
Milan is the main commercial post and central point for British trade promotion work in Italy.
Florence British Consulate, Palazzo Castelbarco Lungarno Corsini 2, 1 50123 Florence. Tel. 263556, telex 570270 (a/b 570270 UKCON I).
Genoa British Consulate-General, Via XII Ottobre 2, 1 16121 Genoa. Tel. 564833, telex 270689 (a/b 270689 UKCON I).
Naples and Bari British Consulate-General, Via Francesco Crispi 122, 1-80122 Naples. Tel. 209227, 663320 and 682482, telex 710330 (a/b 710330 UKCON I).
Palermo British Consulate, Palazzo Vassallo, Via Marchese di Villabianca 9, 1 90143 Palermo. Tel. 253364-6, telex 910111 (a/b 910111 UKCON I).
Turin British Government Trade Office, Corso Massimo D'Azeglio 60, 10126 Turin. Tel. 687832/683921, telex 221464 (a/b BRITRAD I).
Venice British Consulate: Postal address – PO Box 679, 30100 Venice; callers – Accademia Dorsoduro 1051, 30123 Venice. Tel. 27408, telex 410283 (a/b 410283 UKCON I).
Cagliari British Vice Consulate, Via San Lucifero 87, 1-09100 Cagliari. Tel. 662-755.

Ivory Coast
British Embassy, Fifth Floor, Immeuble Shell, Avenue Lamblin, **Abidjan.** (Postal address: Boite Postale 2581, Abidjan.) Tel. 22-66-15, 32-27-76 and 32-49-80, telex 3706 (a/b PRODROME ABIDJAN).

Jamaica
British High Commission, PO Box 575, Trafalgar Road, **Kingston** 10, Jamaica (Britcom, Kingston). Tel. 92-69050, telex 291 2110 (a/b UKREP KIN JA).

Japan
British Embassy, 1 Ichibancho, Chiyoda-ku, **Tokyo** 102. Tel. (03) 265-5511, telex J.22755 (a/b PRODROME).
Osaka British Consulate-General, Hong Kong and Shanghai Bank Building, 45 Awajimachi, 4-chome, Higashi-ku, Osaka 541. Tel. (06) 231-3355/7, telex 522 5167 (a/b BRIOSA).

Jibuti
There is no resident mission in Jibuti. British commercial interests are the responsibility of the British embassy in Sana'a, Yemen Arab Republic.

Jordan
British Embassy, Ras Al Ain Street (PO Box 6062), **Amman.** Tel. 41064.

Kenya
British High Commission, PO Box 30133, 13th Floor, Bruce House, Standard Street, **Nairobi.** Tel. 335944, telex 22219 (a/b UKREP NRB).

Korea, Republic of
British Embassy, **Seoul** BFPO3 via BFPO1 Forces Airmail. Tel. 75-7341/3, telex K27320 (a/b PRODROM K27320).

Kuwait
British Embassy, PO Box SaFat, **Kuwait.** Tel. 439221/2.

Laos
British Embassy, Rue Pandit J. Nehru, PO Box 224, **Vientiane.** Tel. 2333 and 2374.

Lebanon
British Embassy, Avenue de Paris Ras Beirut, **Beirut.** Tel. 36.41.07, telex 20465 (a/b PRODROM 20465 LE).

Lesotho
British High Commission, PO Box 521, **Maseru.** Tel. 3961, telex Lesotho 343 (a/b 343BB).

Liberia
British Embassy, PO Box 120, Mamba Point, **Monrovia.** Tel. 221055, 221107, 221491, telex 4287 (a/b PRODROM LIB).

Libyan Arab Jamahiriya – The Popular Socialist
British Embassy, Sharia Gamal Abdul Nasser, **Tripoli.** Tel. 31191/5, telex 20296 (a/b 20296 BRITEMBLY).

Leichtenstein
There is no resident mission in Leichtenstein. British commercial interests are the responsibility of the Directorate of British Export Promotion in Zurich, Switzerland.

Luxembourg
British Embassy, 28 Boulevard Royal, **Luxembourg.** Tel. 29864/66, telex 3443 (a/b 3443 PRODRO LU).

Madagascar
British Consulate, 5 Rue Robert Ducrocq, BP 167, Antananarivo, **Madagascar.** Tel. 251-51, telex 22334 (a/b Landis Tana).

Malawi
British High Commission, Lingadzi House (PO Box 300 42), **Lilongwe 3.** Telex 4353 (a/b 4353 UK REPLI MI).

Malaysia
British High Commission (PO Box 1030), 13th Floor, Wisma Damansara, Jalan Semantan, **Kuala Lumpur.** Tel. 941533, telex MA 30245 (a/b UKREP MA30245).

Maldive Islands
There is no resident mission in the Maldive Islands. British commercial interests are the responsibility of the British high commission in Colombo, Sri Lanka.

Mali
There is no resident mission in Mali. British commercial interests are the responsibility of the British embassy in Dakar, Senegal.

Malta
British High Commission, 7 St Anne Street, Floriana, **Valletta.** Tel. Central 21285/6/7, telex MW 249 (a/b 249 UKREP MW).

Mauritania
There is no resident mission in Mauritania. British commercial interests are the responsibility of the British embassy in Dakar, Senegal.

Mauritius
British High Commission, PO Box 586, Cerne House, Chaussee, **Port Louis.** Tel. 20201/5, telex IW 4266 (a/b 4266 UKREP IW).

Mexico
British Embassy, Lerma 71, Col Cuauhtemoc, PO Box 96 Bis, **Mexico City,** 5 DF. Tel. 5114880/5 and 5143327, telex 1771185 (a/b 1771185 UKEMMX), 1773093 (a/b 1773093 UKEMMX).

Mongolia
British Embassy, 30 Enkh Taivny Gudamzh (PO Box 703), **Ulan Bator,** The People's Republic of Mongolia. Tel. 51033.

Morocco
British Consulate-General, 60 Boulevard d'Anfa (Boite Postale 762), **Casablanca.** Tel. 26 14 40, 26 14 41. telex 22781 M (a/b BRITAIN 22781 M).

Mozambique
British Embassy, Av Vladimir I. Lenine 310, Caixa Postal 55, **Maputo.** Tel. 26011/12, telex 6-265 (a/b PROMA MO).

Nepal
British Embassy, Lainchaur (PO Box 106), **Kathmandu.** Tel. 11081, 11588/9.

Netherlands
British Embassy, Lange Voorhout 10, **The Hague.** Tel. 645800, telex 31600 (a/b 31600 BEMB NL).
Amsterdam British Consulate-General, Johannes Vermeetstraat 7, Amsterdam. Tel. 739143 (4 lines), telex 15117 (a/b 15117 UKAMS NL).

New Zealand
British High Commission, Reserve Bank of New Zealand Building, 9th Floor, 2 The Terrace, **Wellington** 1 (postal address: PO Box 369). Tel. 726-049, telex NZ 3325 (a/b NZ 3325).
Auckland British Consulate-General, 9th Floor, Norwich Union Building, 179 Queen Street, Auckland 1 (mailing address: Private bag, Auckland 1). Tel. 32-973, telex 2412 (a/b BRIT N NZ 2412).
Christchurch British Commercial Representative, PO Box 1762, Christchurch.

Nicaragua
There is no resident mission in Nicaragua. British commercial interests are the responsibility of the British embassy in San Jose, Costa Rica.

Niger
There is no resident mission in Niger. British commercial interests are the responsibility of the British embassy in Abidjan, Ivory Coast.

Nigeria
British High Commission, 16 Eleke Crescent, Victoria Island, **Lagos** (postal address: Private Mail Bag 12136, Lagos, Nigeria). Tel. 611654, 611934, 611789, 611551, 611842, telex 21247 (a/b 21247 UKREP NG).
Ibadan Office of the British Deputy High Commissioner, Finance Corporation Building, Lebabon Street, Ibadan (postal address: Private Mail Bag 5010, Ibadan). Tel. 410511,410582, telex 31102 (a/b BHC IBN (NG)).
Kaduna Office of the British Deputy High Commissioner, United Bank for Africa Building, Hospital Road, Kaduna (postal address: Private Mail Bag 2096, Kaduna). Tel. 22573/5, telex 71104 (a/b 71104 BHCKAD NG).

Norway
British Embassy, Thomas Heftyesgate 8, **Oslo 2.** Tel. 563890/7, telex 11575 (a/b 11575 UKOSL N).
Bergen British Consulate, Slottgsten 1, 5015 Bergen. Tel 217033, telex 42660 (a/b 42660 UK BGN N).

Okinawa Prefecture
British commercial interests are the responsibility of the British consulate-general, Osaka, Japan.

Oman
British Embassy, **Muscat** (postal address: PO Box 300, Muscat). Tel. 722411, telex Muscat 3216 (a/b PRODROME 3216).

Pakistan
British Embassy, Diplomatic Enclave, Ramma 5 (PO Box 1122). **Islamabad.** Tel. 22131/5.
Karachi British Consulate-General, York Place, Runnymede Lane, Port Trust Estate, Clifton, Karachi-6. Tel. 53 20 41/46.
Commercial matters concerning the northern areas, including the provinces of Punjab and North West Frontier, are dealt with by the embassy, and for Sind and Baluchistan provinces by the consulate at Karachi.

Panama
British Embassy, Via Espana 120, **Panama City** (postal address: Apartado 889, Panama City Panama). Tel. Panama City, 23-0451, telex 3481020 (a/b PROPANA).

Papua New Guinea
British High Commission, United Church Building (3rd Floor), Douglas Street, **Port Moresby** (postal address: PO Box 739, Port Moresby). Tel 212500, telex NE 22142 (a/b UKREP 22142).

Paraguay
British Embassy, 4th Floor, Edificio Seguros Patria, Av Pte Franco, 706 esg O'Leary, **Asuncion** (postal address: Casilla de Correo 404, Asuncion). Tel. 49146 and 44472, telex 139 (a/b PRODROME 139 PY).

Peru
British Embassy, Edificio Pacifico-Washington, Plaza Washington, Avenida Arequipa (sextra cuadra), **Lima** (postal address: PO Box 854, Lima). Tel. 283830, telex 25230 (a/b 25230 PU PRODROME).

Philippines
British Embassy, Electra House, 115-117 Esteban Street, Legaspi Village, Makati, Metro **Manila** (postal address: PO Box 1970 MCC). Tel. 8910-51/8, telex 63282 (a/b 63282 PRODROME PN).

Poland
British Embassy, Aleja Roz 1, **Warsaw.** Tel. 281001-5, telex 813694 (a/b 813694 PROD PL).

Portugal
British Embassy, Rua de S. Domingos a Lapa 35-39, **Lisbon 3.** Tel. 661191/5, telex 12278 (a/b 12278 PROLIS P).
Oporto Consul Commercial, Avenida da Boavista 3072. Tel. 02-684789.

Qatar
British Embassy, PO Box 3, **Doha.** Tel. 321991/4, telex DH4205 (a/b 4205 PRODRO DH).

Romania
British Embassy, 24 Strada Jules Michelet, **Bucharest.** Tel. 111635/6, telex 011-295 (a/b 11295 PRODM R).

Rwanda
There is no resident mission in Rwanda. British commercial interests are the responsibility of the British embassy in Kinshasa, Zaire.

Saudi Arabia
British Embassy, Jedda Towers, Citibank Building (PO Box 393). **Jedda.** Tel. 27306, 27122 and 58412, telex 401043 (a/b PRODROM SJ).

Senegal
British Embassy, 20 Rue du Docteur Guillet (BP 6025), **Dakar.** Tel. 217392, 210971, 2174N1 (sic), 217N3 (sic),telex 548 (a/b PRODROM SG).

Seychelles
British High Commission, Victoria House (3rd Floor), PO Box 161, **Victoria.** Tel. 23055/6, telex 269 (a/b UKREP SZ).

Sierra Leone
British High Commission, Standard Bank of Sierra Leone Ltd Building, Lightfoot Boston Street, **Freetown.** Tel. 23961-5, telex 3235 (a/b 3235 UKREP SL).

Singapore
British High Commission, Tanglin Circus, **Singapore 10** (postal address: Tanglin PO Box 19). Tel. 639333, telex RS 21218 (a/b UKREP SP RS 21218).

Solomon Islands
British High Commission, PO Box 676, **Honiara.** Tel. 752, telex 66324 (a/b UKREP HQ 66324).

Somali Democratic Republic
British Embassy, Waddada Xasan Geeddi Abtoow 7/8, PO Box 1036, **Mogadishu.** Tel. 22088/9 and 34072/3, telex Mogadishu 617 (a/b PRODROME MOG SM).

South Africa, Republic of
British Embassy, 6 Hill Street, Arcadia, **Pretoria** 0002. Tel. 74-3121, telex 3641 (a/b 3641 SA).
Johannesburg British Consulate-General, 5th Floor, Nedbank Mall, 145/7 Commissioner Street, Johannesburg 2000 or PO Box 10101. Tel. 218161, telex 8-7115 (a/b 8-7115 JH). Telegraphic address: Britconsul, Johannesburg.
Johannesburg is the senior commercial post and the central point for British trade promotion work in South Africa.
Cape Town British Consulate-General, 11th Floor, African Eagle Centre, 2 St Georges Street, PO Box 1346, Cape Town 8000. Tel. 41-1466/8, telex 5-7447CT (a/b 5-7447CT).
Durban British Consulate-General, 7th Floor, Barclays Bank Building, Field Street, Durban 4001, Durban 4000. PO Box 1404, Durban 4000. Tel. 313131 (five lines), telex 6-2428 (a/b 6-2428 SA).

Spain
British Embassy, Calle de Fernando el Santo 16, **Madrid 4.** Tel. 419-0200/12, telex 27656 (a/b 27656 INGLAE).
Algeciras British Consulate-General, Avenida Francisco Franco II. Tel. 661600, 661604, telex 78079 (a/b BRAGLG E).
Barcelona British Consulate-General, Edificio Torre de Barcelona, Avenida Generalisimo Franco 477 (13th Floor), Apartado de Correos 12111, Barcelona 36. Tel. 3222151 (5 lines), telex 52799 (a/b 52799 BRBARE).
Bilbao British Consulate-General, Alameda de Urquijo 2-8, Bilbao 8. Tel. 4157600, 4157711, 4157722, telex 32446 (a/b 32446 BRBILE).
Vigo British Vice-Consulate, Plaza de Compostela, 6th Floor (PO Box 49), Vigo. Tel. 986-21 14 50 and 21 14 87.
Las Palmas British Consulate, Edificio Hocasa, 6 Piso, Calle Alfedo L. Jones, 33 (PO Box 2020), Las Palmas, Gran Canaria, Canary Islands. Tel. 262508, telex 95276 (a/b 95276 BRTLP(E)).

Sri Lanka
British High Commission, Galle Road, Kollupitiya, **Colombo 3** (postal address: PO Box 1433, Colombo). Tel. 27611/17, telex 1101 (a/b UKREP, COLOMBO).

Sudan
British Embassy, PO Box 801, New Aboulela Building, Barlaman Avenue, **Khartoum.** Tel. 70760, 70766-9.

Surinam
There is no resident mission in Surinam. British commercial interests are the responsibility of the British High Commission in Georgetown, Guyana.
There is an honorary consul at the British consulate at Paramaribo who sees business visitors. His address is: Van't HogerHuystraat (PO Box 1300), **Paramaribo.** Tel. 72870.

Swaziland
British High Commission, Allister Miller Street, **Mbabane** (postal address: British High Commission, Private Bag, Mbabane). Tel. 42581-42586, telex 2079 (a/b 2079 WD).

Sweden
British Embassy, Skarpogatan 6-8 S-115 27 **Stockholm.** Tel. 670140, telex 19340 (a/b 19340 BRITEMB S).
Gothenburg British Consulate-General, Götgatan 15, SK-411 05 Gothenburg. Tel. 136277, telex 20041 (a/b BRITAIN S).
Malmo British Consulate, Lilla Nygatan 11, S-211 38 Malmo. Tel. 126625.

Switzerland
Directorate of British Export Promotion in Switzerland: British Consulate-General, Dufourstrasse 56, 8008 **Zurich.** Tel. (01) 47 15 20/26, telex 54260 (a/b 54260 UKZUR CH).
Zurich is the senior commercial post and central

point for British trade promotion work in Switzerland.
Berne British Embassy, Thunstrasse 50, 3005 Berne. Tel. (031) 445021/6, telex 32687 (a/b 32687 UKBNE CH).
Basle British Consulate, PO Box 252, Dufourstrasse 9, CH-4010 Basle. Tel. (061) 235842/3, telex 62959 (a/b UKBAL CH).
Geneva British Consulate-General, 6th Floor, Rue de Vermont 37-39, 1211 Geneva 20. Tel. (022) 343800, 332385, telex 22956 (a/b 22956A (or B) UKGV CH).

Syria
British Embassy, Quarter Maliki, 11 Mohammad Kurd Ali Street, Malki Avenue (PO Box 37), **Damascus.** Tel. 332561-3, telex 11049 (a/b 11049 BRITEM SY).

Tahiti
There is no resident mission in Tahiti. British commercial interests are the responsibility of the British embassy in Paris, France.

Tanzania
British High Commission, Permanent House, corner Azikiwe Street/Independence Avenue, PO Box 9112, **Dar es Salaam.** Tel. 29601, telex 41004 (a/b 41004 UKREP).

Thailand
British Embassy, Ploenchit Road, **Bangkok.** Tel. 2527161 (Monday to Friday 0800-1630), 2527160 all other times.

Togo
There is no resident mission in Togo. British commercial interests are the responsibility of the British high commission in Accra, Ghana.

Tonga
British High Commission, PO Box 56, **Nuku'alofa.** Telex 66226 (a/b UKREP 66226 TS).

Trinidad and Tobago
British High Commission, Furness House, 90 Independence Square, PO Box 225, **Port of Spain,** Trinidad. Tel. 52861-6, telex WG 3224 (a/b UKREP 224).

Tunisia
British Embassy, 5 Place de la Victoire, **Tunis.** Tel. 245100, 245324, 245649, 244805, telex TUNIS 12007 (a/b PRODROM 12007 TN).

Turkey
British Embassy, Sehit Ersan Caddesi 46a, Cankaya, **Ankara.** Tel. 274310/5, telex 42320 (a/b PROD TR).
Istanbul British Consulate-General, Tepebasi, Beyoglu, Istanbul. Tel. 447545-9 and 498874, telex 22298 (a/b BRIT IST).

United Arab Emirates
Abu Dhabi British Embassy, PO Box 248, Abu Dhabi, UAE. Tel. 43033/4/5, telex 22234 (a/b 22234 PRODRO AH).
Dubai British Embassy, Tariq Ibn Zayed Street (PO Box 65), Dubai, UAE. Tel. 431070, 431893 and 431993, telex 456426 (a/b PRODR EM).

United States
British Embassy, 3100 Massachusetts Avenue NW, **Washington DC.** 20008. Tel. HO21340 or 4621340 (area code 202), telex 892370 (a/b PRODROME WSH).
New York British Trade Development Office, 150 East 58th Street (19th and 20th Floors), New York, NY 10022. Tel. 593-2258, area code 212, telex 126919 (a/b PRODROME NYK).
New York is the senior commercial post and the central point for British trade promotion work in the United States.
Atlanta British Consulate-General, Suite 912, 225 Peachtree Street NE, Atlanta, Georgia 30303. Tel. 524-5856/8, area code 404, telex 542517 (a/b BRITAIN ATL).
Boston British Consulate-General, Suite 47r0, Prudential Tower, Boston, Massachusetts 02199. Tel. 261-3060, area code 617, telex 940994 (a/b BRITAIN BSN).
Chicago British Consulate-General, 33 N. Dearborn Street, Chicago, Illinois 60602. Tel. 346-1810, area code 312, telex 254432 (a/b BRITAIN CGO).
Cleveland British Consulate-General, 1828 Illuminating Building, 55 Public Square, Cleveland, Ohio 44113. Tel. 621-7674, area code 216, telex 980126 (a/b BRITAIN CLV).
Dallas British Consulate, 813 Stemmons Tower West, 2730 Stemmons Freeway, Dallas, Texas 75207. Tel. 637-3600, area code 214, telex 730382 (a/b BRITAIN DAL).
Detroit British Consulate-General, 2200 Detroit Bank and Trust Building, 211 Fort Street West, Detroit, Michigan 48226. Tel. 962-4776, area code 313, telex 230158 (a/b BRITAIN DET).
Houston British Consulate-General, Suite 2250, 601 Jefferson, Houston, Texas 77002. Tel. 659-6270, area code 713, telex 762-307 (a/b BRITAIN HOU).
Los Angeles British Consulate-General, 3701 Wilshire Boulevard, Los Angeles, California 90010. Tel. 385-7381, area code 213, telex 677421 (a/b BRITAIN LSA).
Philadelphia British Consulate-General, 12 South 12th Street, Philadelphia, Pennsylvania 19107. Tel. 92 52430, area code 215, telex 834636 (a/b BRITAIN PHA).
St Louis British Consulate-General, 7th Floor, Gateway Tower, 1 Memorial Drive, St Louis, Missouri 63102. Tel. 621-4688, area code 314, telex 447190 (a/b BRITAIN STL).
San Francisco British Consulate-General, 9th Floor, Equitable Life Building, 120 Montgomery Street, San Francisco, California 94104. Tel. 981-3030, area code 415, telex 340628 (a/b BRITAIN SFO).
Seattle British Consulate-General, 1216 Norton Building, 801 2nd Avenue, Seattle, Washington 98104. Tel. 622-9253, area code 206, telex 329602 (a/b BRITAIN SEA).

Upper Volta
There is no resident mission in Upper Volta. British commercial interests are the responsibility of the British embassy in Abidjan, Ivory Coast.

Uruguay
British Embassy, Calle Marco Bruto 1073, **Montevideo.** Tel. 791033, 791133, 799173, telex 6439 (a/b UY 6439).

USSR
British Embassy, Kutuzovsky Prospekt 7/4, **Moscow** G248. Tel. 241-1033/4 (231 85 11/2 and 231 23 31 outside office hours), telex 7341 (a/b PRODROME SU).

Venezuela
British Embassy, 12th Floor, Avenida La Estancia No. 10, Cuidad Commercial Tamanaco, Chuao, **Caracas** (postal address: Apartado 1246, Caracas). Tel. 91-12-55, 91-14-77, telex 23468 (a/b 23468 PROCARAC).

Vietnam
British Embassy, 16 Pho Ly Thuong Kiet, **Hanoi.** Tel. 52349 and 52510.

Yemen Arab Republic
British Embassy, 13 Al Qasr al Jumhuri Street (PO Box 1287), **Sana'a.** Tel. 5428.

Yemen, People's Democratic Republic of
British Embassy, 28 Shara Ho Chi Minh Street, Khormaksar, **Aden.** Tel. 24801-4.

Yugoslavia
British Embassy, 46 Generala Zdanova 11000 **Belgrade.** Tel. 645034, 645043, 645055, 645087, telex 11468 (a/b 11468 YU PROBEL).
Zagreb British Consulate-General, Ulica Ilica 12 (PO Box 454), 41001 Zagreb. Tel. 445-522, 413-819 (Commercial section), telex 21309 (a/b 21309 YU BR ZAG).

Zaire
British Embassy, 9 Avenue de l'Equateur, 5th Floor, (BP 8049), **Kinshasa.** Tel. 23483/6 and 22666.

Zambia
British High Commission, Independence Avenue, PO Box RW50, **Lusaka.** Tel. 51122, telex 41150 (a/b UKREP ZA 41150).

British trade correspondents

Trade correspondents generally give part-time service to the Departments of Trade and Industry. Often they are civil servants who have been selected to act in this capacity in addition to their normal duties; in certain other territories local businessmen undertake these functions. The extent to which British trade correspondents can assist British business visitors is therefore limited.

Africa, South West/Namibia
Mr M. A. Isaacson, PO Box 29, **Windhoek 9100,** South West Africa. Tel. 27983.

Belize
Mr Gordon Roe, 6 Fort Street, PO Box 438, **Belize City.** Tel. 2383.

Falkland Islands
The Chief Secretary, **Stanley.**

Gibraltar
The Financial and Development Secretary, Government Secretariat, **Gibraltar.** Tel. 70071, ext. 51, telex GK 233 (a/b SECRETARIAT GIBRALTAR).

Gilbert Islands
The Secretary, Ministry of Trade and Communications, PO Box 487, Betio, **Tarawa,** Gilbert Islands.

New Hebrides
Secretary for Financial Affairs, British Residency, **Vila.**

Santa Cruz
Edificio SAC1 2 do Piso, Calle Rene Moreno Esq Pari. Tel. 29154.

St Helena
The Colonial Treasurer, The Castle, Island of St Helena, South Atlantic Ocean.

Telegraphic address

Unless otherwise, stated the telegraphic addresses to be used are:

Embassies: 'Prodrome' followed by the town name.

Consular offices: 'Britain' followed by the town name.

High commission offices: 'Ukrep' followed by the town nane.

But note . . .

Auckland, New Zealand: Britauck.

Bermuda: Britradev, New York.

Canada: consular offices – 'Britcon' followed by the town name, except Winnipeg which is 'Britrad' Winnipeg.

Pakistan: Britcongen-Karachi.

Town index

Towns with commercial representation

Abidjan, Ivory Coast
Abu Dhabi, United Arab Emirates
Accra, Ghana
Addis Ababa, Ethiopia
Adelaide, Australia
Aden, Yemen, People's Democratic Republic of
Alexandria, Egypt
Algeciras, Spain
Algiers, Algeria
Amman, Jordan
Amsterdam, Netherlands
Ankara, Turkey
Antananrivo, Madagascar
Antwerp, Belgium
Asuncion, Paraguay
Athens, Greece
Atlanta, United States
Auckland, New Zealand
Baghdad, Iraq
Bahrain, Bahrain
Banda Seri Begawan, Brunei
Bangkok, Thailand
Banjul, The Gambia
Barcelona, Spain
Basle, Switzerland
Beirut, Lebanon
Belgrade, Yugoslavia
Bergen, Norway
Berlin, Democratic Republic and Federal Republic of Germany
Berne, Switzerland
Bilbao, Spain
Blantyre, Malawi
Bogota, Colombia
Bombay, India
Bonn, Germany
Bordeaux, France
Boston, United States
Brasilia, Brazil
Bridgetown, Barbados
Brisbane, Australia
Brussels, Belgium
Bucharest, Romania
Budapest, Hungary
Buenos Aires, Argentina
Cairo, Egypt, Arab Republic of
Calcutta, India
Canberra, Australia
Cape Town, South Africa
Caracas, Venezuela
Casablanca, Morocco
Chicago, United States
Christchurch, New Zealand
Cleveland, United States
Colombo, Sri Lanka
Copenhagen, Denmark
Dacca, Bangladesh
Dakar, Senegal
Dallas, United States
Damascus, Syria
Dar es Salaam, Tanzania
Detroit, United States
Dilikusha, Bangladesh
Doha, Qatar
Douala, Cameroon
Dubai, United Arab Emirates
Dublin, Irish Republic
Durban, South Africa
Dusseldorf, Germany
Edmonton, Canada
Florence, Italy
Frankfurt, Germany
Freetown, Sierra Leone
Gaborone, Botswana
Geneva, Switzerland
Genoa, Italy
Georgetown, Guyana
Gothenburg, Sweden
Guatemala City, Guatemala
Hague, The, Netherlands
Halifax, Canada
Hamburg, Germany
Hanoi, Vietnam
Hanover, Germany
Havana, Cuba
Helsinki, Finland
Hong Kong, Hong Kong
Houston, United States
Ibadan, Nigeria
Islamabad, Pakistan
Istanbul, Turkey
Jakarta, Indonesia
Jeddah, Saudi Arabia
Johannesburg, South Africa
Kabul, Afghanistan
Kaduna, Nigeria
Karachi, Pakistan
Kathmandu, Nepal
Khartoum, Sudan
Kingston, Jamaica
Kinshasa, Zaire
Kuala Lumpur, Malaysia
Kuwait, Kuwait
Lagos, Nigeria
La Paz, Bolivia
Las Palmas, Spain (Canary Islands)
Libreville, Gabon
Lille, France
Lima, Peru
Lisbon, Portugal
Los Angeles, United States
Luanda, Angola
Lusaka, Zambia
Luxembourg, Luxembourg
Lyons, France
Madras, India
Madrid, Spain
Manila, Philippines
Malmo, Sweden
Manama, Bahrain
Maputo, Mozambique
Marseilles, France
Maseru, Lesotho
Mbabane, Swaziland
Melbourne, Australia
Mexico City, Mexico
Milan, Italy
Mogadishu, Somali Republic
Monrovia, Liberia
Montevideo, Uruguay
Montreal, Canada
Moscow, USSR
Munich, Germany
Muscat, Oman
Nairobi, Kenya
Naples, Italy
Nassau, Bahamas
New Delhi, India
New York, United States
Nicosia, Cyprus
Nuku'alofa, Tonga
Oporto, Portugal
Osaka, Japan
Oslo, Norway
Ottawa, Canada
Palermo, Italy (Sicily)
Panama City, Panama
Paramaribo, Surinam
Paris, France
Peking, China
Perth, Australia
Philadelphia, United States
Port-au-Prince, Haiti
Port Louis, Mauritius
Port Moresby, Papua New Guinea
Port of Spain, Trinidad
Prague, Czechoslovakia
Pretoria, South Africa
Quito, Ecuador
Rangoon, Burma
Reykjavik, Iceland
Rio de Janeiro, Brazil
Rome, Italy
St Louis, United States
Sana'a, Yemen Arab Republic
San Francisco, United States
San Jose, Costa Rica
San Salvador, El Salvador
Santiago, Chile
Santo Domingo, Dominican Republic
Sao Paulo, Brazil
Seattle, United States
Seoul, Korea, Republic of
Singapore, Singapore
Sofia, Bulgaria
Stockholm, Sweden
Strasbourg, France
Stuttgart, Germany
Suva, Fiji
Sydney, Australia
Tehran, Iran
Tel Aviv, Israel
The Hague, Netherlands
Tokyo, Japan
Toronto, Canada
Torshavn, Faroe Islands (Denmark)
Tripoli, Libyan Arab Jamahiriya, The Popular Socialist
Tunis, Tunisia
Turin, Italy
Ulan Bator, Mongolia
Vancouver, Canada
Valletta, Malta
Venice, Italy
Victoria, Seychelles
Vienna, Austria
Vientiane, Laos
Vigo, Spain
Warsaw, Poland
Washington, United States
Wellington, New Zealand
Winnipeg, Canada
Zagreb, Yugoslavia
Zurich, Switzerland

slovakia, Italy, South Africa, Holland, and the United States; Colour Film Services, a facilities company specialising in video-tape-to-film conversion work for the film and television industry, secured very promising inquiries from major clients in Holland, Brazil, Austria, the United States, Kuwait, New Zealand, Thailand, Italy, Switzerland, Belgium, Sweden, and the UK; London Weekend Television concluded a major distribution contract with Latin America which could bring them over $5 million in profits over the next five years. LWT programmes are to be distributed in Latin America by Interamerica, a subsidiary of Inter American Entertainment Company of Los Angeles; The Football Association, producers of soccer matches under camera coverage by the BBC and ITV companies, sold FA cup recordings to El Salvador, Colombia, Malaysia, Thailand, Singapore, Kenya, Mauritius, and Japan.

This was a further very successful MIP-tv for the British television industry whose representatives will be returning in force to the next event which is to be held from 18 to 24 April 1980.

Fine, fine-arts fair

From P. S. Sullivan, British embassy, The Hague

For the first time a joint venture was arranged at the bi-annual exhibition of paintings, Pictura, at the Eurohal in Maastricht from 20 to 30 April.

The joint venture was made up of 12 members of the Art Dealers Trade Association. Nine of the companies appeared at exhibitions in 1975 and 1977 and three were newcomers. The hard work put into the previous two exhibitions paid off and almost without exception the exhibitors thought that this year's exhibition looked like being a success.

Maastricht's connections with Germany, Belgium, the north of France and the Netherlands make it a cultural crossroads and the ideal venue for the specialised exhibition which the fine arts trade wants. Most dealers believed that the exhibition compared favourably with the fine arts exhibitions at more popular locations elsewhere in Europe.

Value of Pictura

The value of Pictura is not only in the business which British representatives do at the show itself, although some exhibitors sold paintings before the exhibition was 48 hours old and expected to sell many more before the exhibition doors closed on 30 April. But firms' representatives made the point that the initial meetings with potential clients at the exhibition often lead to a sale some months later. The contacts between British representatives and dealers from elsewhere in Europe provide an opportunity to exchange information about master works.

The Eurohal administration estimated that the number of visitors was likely to reach close on 14 000 by the end of the exhibition. All the British representatives were satisfied with the level of new potential business which the exhibition attracted this year.

Britain takes offshore technology to Houston

British companies made a major contribution to the biggest and most important oil and gas industry event in the world – the annual Offshore Technology Conference (OTC) – in Houston in May. John Cole-Morgan of the British Overseas Trade Board, assisted by Allan Hird of British Information Services in New York and Helen Mann of the British consulate-general in Houston, report on the impact British technology made at the show.

As a relative newcomer to the oil and gas industry Britain's contribution to OTC this year was more than creditable. To start with there were some 1500 UK visitors, and one of them, the Duke of Kent, as vice-chairman of the British Overseas Trade Board, visited each of the 80 stands in the British joint venture. Over 160 companies were involved in the large British section sponsored by the Association of British Oceanic Industries and the British Overseas Trade Board.

In addition there were 22 British contributions to the conference ranging from the 'Deep-water drilling using manned submersible Pisces', to 'ice forces on conicle structures'.

The OTC has become BOTB's biggest venture in north America and Britain had by far the largest group of exhibitors from outside the United States. But it was not the size nor the number of companies that brought people to the British stands. They came to see the wealth of new ideas which certainly seemed thicker on the ground than elsewhere. Over 80 000 visitors from 90 countries visited the 1800 stands at the show.

Imagine a water-tight concrete telescope 1500 ft long tethered at the small end by ropes to the seabed and with a production platform on the big end and you will have some idea of what Taylor-Woodrow's articulated buoyant column – Arcolprod – will look like. The design study for the Arcolprod won the Petroleum Engineering international special meritorious award for engineering innovation at the exhibition. Arcolprod is a complete system for drilling production and storage of hydrocarbons and it is estimated that at depths beyond 500 ft it would be cheaper than a fixed structure. It is thought that building of the first one could start in about three years' time.

A model of a floating production system on a tethered buoyant platform designed by Vickers Offshore (Projects and Developments) Ltd, part of the British Shipbuilders group, was another design study which brought people from all parts of the exhibition even though it was tucked away in a corner. Commissioned by BP, the floating platform will enable production to take place in water of depths over 2000 ft. Conoco is thought to have decided already to use a tethered buoyant platform on the Hutton field and to aim to have it in service by 1983. Vickers Offshore is hopeful that as a result of the design study it will obtain the contract which could mean at least £100 million worth of equipment and work for British industry.

A 'Jules Verne' solution to deep-sea oil and gas production, being promoted for the first time at OTC, and which could become a reality in about three to five years' time was on the Humphreys and Glasgow stand. Along with

The Duke of Kent at the controls of a manipulator made by the Osel Group for attachment to submersibles.

BICC, Rolls-Royce and McAlpine the company has been doing preliminary studies on manned sub-sea production plants for use in water depths from 600 to 3000 ft. The group believes that the concept with an estimated cost of £300 million is feasible and could be used for processes such as the separation of oil, gas and water, water injection, gas compression, oil storage and tanker loading. A further 12 months' design study is planned.

On the GEC stand another development still in the design and development stage – a natural gas liquid (NGL) off-loading system – was being shown for the first time. The bow loading system has been designed to handle NGL at temperatures down to −56°C and though there are competitive systems on the market GEC is fairly confident that the company is on to a winner.

The hazards of transferring essential goods from supply ships to offshore installations are well known. In heavy weather it can become extremely dangerous for the crew and the risk of damage to the vessel, cargo, crane and rig is considerable. Twelve cranes have been lost to the North Sea since 1969, some of them as a result of the crane snatching as the load is going down. Ferranti Offshore Systems was exhibiting for the first time a system it has

The Safari Filtron

Cheaper and better than a week in bed

When you're away on business or holiday, you don't want to wind up with an upset stomach or serious illness.

Unfortunately, travellers to many countries still run a real risk with Typhoid, Gastro-enteritis, Salmonella, Cholera and other germs in the tap water. To be safe you need the Safari Filtron. The Filtron thoroughly filters water, and uses an electric charge to kill the germs it contains.

Independent tests show it to be 100% effective against all water-borne bacteria, so it's a safer system than relying on your own anti-bodies – or trying to supplement them with pills.

The Filtron acts fast: delivering a glass of pure drinking water in under one minute. Just as easy as relying on chemical purifiers – and a good deal more pleasant when you've worked up a thirst.

Battery operated and fully portable, a Filtron is the best way of ensuring a supply of sterilised drinking water...wherever you find yourself!

Special features ● Pocket size – only 125 x 85 x 40 mm ● Batteries purify 40 litres ● Unit guaranteed twelve months.

Available at most large stores

I would like the protection of Safari Filtron.
Please send me____ at £27·95 each, postage paid.
I enclose my cheque for £_____
or debit my Access/Barclaycard.
No.
Name
Address

TI

**Cheque payable to Safari Water Treatments Limited. Post to: Steetley Safari (Water Treatments) Limited, 28 The Spain, Petersfield, Hants. Telephone: 0730 4452.*

developed to overcome the problem. Called the load transfer system, it is designed to minimise the impact transmitted on to the crane during dynamic lifting offshore. The system which can be attached to existing and new cranes and costs about £70,000 works by automatically initiating full hoist just before the crest of a wave.

Also on the Ferranti stand was a system which will greatly increase the accuracy of surveying of multiple wells. The basis of the new equipment is an inertial system which will give an accuracy better than 6 in at 6000 ft. Although more costly than the gyro system in use today its greater accuracy increases safety by reducing the risk of blow-outs as a result of collisions of wells. David Morgan of Ferranti said at OTC that two systems had been put into production in November and that Shell had been satisfied in March when the company signed the contract.

A stereoscopic underwater tv system for remotely-controlled vehicles was launched at the show in prototype form by Osprey Electronics Ltd. The system which is based on two viewing lenses and two screens was widely thought to give a much better depth perception than other systems most of which are single channel and use polarisation to produce the separate images. Dave Thompson, a director of Osprey Electronics, said that as a result of showing its equipment at OTC the firm had made contact with one potential customer who intended making a special journey to Wick to see them and who was interested in obtaining about 60 customer-designed systems a year.

A gas generator developed by Leafields Engineering Ltd in conjunction with the Royal Navy for use in mine recovery was another highlight in the British section. Peter Upshall, offshore projects engineer for the company, said 'our presence at OTC has certainly been worthwhile. We want to be here next year perhaps after designing other systems using the same technique for de-ballasting sub-sea structures and the rescue of manned and the recovery of unmanned submersibles'.

There were 20 new names in the list of British companies taking part in OTC this year and among them was Northern Engineering Industries, appearing for the first time as a group, whose Thompson friction-welding unit generated many inquiries from potential customers throughout the United States and Mexico. Ken Hodgkinson, a director of NEI Clark-Chapman Engineering Ltd, felt that OTC was a great stimulus to innovation and that it would also help the firm to consolidate its share of the offshore market and provide a springboard to business activities in other areas.

On the day of the Duke's visit to the show Rolls-Royce was feeling reasonably pleased as the company had just heard that its single-package generating system, SK30M, which it had sold to Conoco had achieved its contracted output while on test.

Although not concerned with oil but definitely concerned with offshore a model of a £1 million underwater rock trenching machine being developed by the Westminster Dredging Co for the Central Electricity Generating Board attracted a lot of attention. The machine has been designed to embed cables in the sea floor and it is hoped that it will be used to install the 200 MW cable link between England and France. Another machine is being built concurrently by the French. Both machines will be tested on similar sites later this year and there is likely to be keen competition for the trench digging and cable laying contract which will probably be in excess of £200 million.

No significant orders were announced by British companies during OTC but on the business side a joint venture was officially agreed on the first day of the show between Westminster Offshore Ltd and Offshore Emergency Systems Inc of Houston to introduce a new fire control system known as the standby offshore system for use on platforms.

Ultraglide, a Montrose hydraulic concentrate company exhibiting at OTC for the fourth time also announced during the exhibition that it had tied up a small joint venture with a Mexican company which would enable the company to market its various products in the United States at a more competitive price and also provide access to the Mexican market itself. Dr Alan Jemmett, managing director, thought that appearance at OTC was essential to maintain credibility as a supplier to the oil industry. 'You have to be seen as part of the club', he said.

Graham Richards, managing director of The Sound Powered Telephone Co, said that there had been considerable interest in its public address and talk-back system for use on oil rigs and that the total inquiries received during the event could mean a 25 per cent increase in the company's turnover amounting to some £200,000 worth of work. 'This is our first time here and we have found it a fantastic show. We want to be back next year', he said.

Lloyds Register of Shipping at the exhibition for the first time as an exhibitor felt that the journey to Houston had been worthwhile. They were asked to do a platform repairs and were able to quote on two major jobs one in the Middle East and one in the Far East. Richard Davies, the managing director of Acoustic Technology Ltd of Southampton, whose company is a trouble-shooter on noise levels said that the exhibition had been extremely useful and had provided leads on noise and vibration problems in Abu Dhabi and Dubai.

From the reaction of British exhibitors there can be no doubt about the importance of OTC as a place to exchange ideas in the oil industry. So successful is it in fact that during the event there was speculation as to whether America's fifth largest city could continue to accommodate it if it grew any more. There were signs however that having grown geometrically for the last 10 years – there were only 4000 visitors in 1969 – it had now reached its peak. Certainly Houston would not want to lose such a prestigious event.

ECGD addresses

The Export Credits Guarantee Department's head office is at Aldermanbury House, Aldermanbury, London EC2P 2EL, tel. 01-606 6699. ECGD has 10 local offices in various parts of the United Kingdom, and these are listed from time to time in *Trade and Industry*.

Overseas trade country data

Australia

Spanners and wrenches. A notice in *Trade and Industry*, 6 October 1978, reported a reference to the Industries Assistance Commission (IAC) on the question as to whether assistance should be accorded the production in Australia of spanners and wrenches falling within tariff item 82.03.2.

The IAC has now released a draft report of its inquiry to give interested parties an opportunity to examine and comment on it before the report is finally settled.

In order to receive submissions on the draft the commission will hold a further public hearing at the Public Inquiry Room, Industries Assistance Commission, Kings Avenue, Canberra ACT 2600, beginning at 10.00 hours on Wednesday, 30 May.

Copies of the draft report have been forwarded to all witnesses who gave evidence at the previous hearings. Other interested persons may obtain a copy on request from the Secretary, Industries Assistance Commission, PO Box 80, Canberra ACT 2600. It is hoped that a copy of the draft report will shortly be available from Department of Trade, Room 363, 1 Victoria Street, London SW1H 0ET.

To enable the commission to examine submissions and discuss them with witnesses at the hearing, it is requested that copies of intended submissions be forwarded to the commission before the public hearings.

Inquiries: CRE 01-215 319

Ref: CRE 1466/78

Lighting fittings. A notice in *Trade and Industry*, 16 February, reported that the Australian government had requested the Industries Assistance Commission to inquire into the question as to whether chokes and ballasts falling within tariff item 85.01.23 imported into Australia at the developing country preferential rate of duty were causing or threatening injury to the local industry.

The government has accepted the commissions finding that the import of these goods at the developing country preferential tariff rate was not causing or threatening injury to the Australian industry.

Inquiries: CRE 01-215 5319

Ref: CRE 426/79

Belgium

Washing machines and dishwashers. According to information received from the British embassy in Brussels, new legislation has recently been passed in Belgium which requires manufacturers of washing machines and dishwashers to fix *Anseau* labels to the front of all their machines.

If the machines were already on sale in Belgium before 31 December 1978 obtaining a label is a formality. Machines not on sale by that date must be fitted with a special valve which prevents used water and food residues from returning into the water mains.

Manufacturers who experience difficulty in obtaining the special valves should contact the Beglian manufacturer Ets Halbart SA, rue des Goujons 57, 1070 Bruxelles.

To obtain *Anseau* labels either the manufacturer or the importer of the machines should make an application to the Communauté de l'Electricité (CEG), Galerie Ravenstein 3, Bte 1, 1000 Bruxelles.

Inquiries: OTAR 01-248 5757 ext. 288.

Grenada

Import licensing. The Grenada authorities have announced that import licences are now required for the following goods:

Shirt-jacks, trousers, jerseys, shirts (gents), denim jeans, pyjamas.

Inquries: OTAR 01-248 5757 ext. 7312.

Hong Kong

Summer-time. Hong Kong has decided to re-introduce summer-time (ie GMT + 9) with effect from 03.30 hours on Sunday 13 May until 21 October as a fuel-saving measure.

Japan

Import duty changes. The English translation of the 1979 Japan tariff schedule has been received. Changes from 1 April affect the following items:

CCCN no.	Description
07.01	Onions (fresh or chilled)
12.07	Insect flower
20.06	Chesnuts, other than roasted, in airtight containers of not more than 10 kg each, containing added sugar
27.10	Petroleum oils, etc
29.35	Furfural
39.03	Ham casings and the like
39.07	Articles from ham casings and the like
43.01	Raw fur skins of rabbits
70.13	Manufactured articles of glass-ceramics
76.01	Unwrought alloyed aluminium
84.08	Gas turbines for ships; hydrojet propulsion machinery for use in ships (with a thrust of over 80 tonnes per minute); parts for gas turbines and hydrojet propulsion equipment for use in ships; hydrojet propulsion machinery for use in ships (with a thrust of over 80 tonnes per minute)
84.63	Marine reduction gear (with a power input of above 10 000 rpm) and parts thereof
84.65	Marine propellers (having blades where the greatest length is more than five times the greatest width), related marine controllable pitch equipment and parts thereof

Inquiries: specifying the CCCN, OTAR 01-248 5757 ext. 420/7062.

New labelling requirements. The Japanese Ministry for International Trade and Industry have issued an order which introduces labelling requirements for nine new items. Because details of the new requirements are complex and are available in Japanese only. British exporters are advised to check with their importer or agent how specific products are affected.

Copies of the regulations in English or Japanese will NOT be available from OTAR. The order comes into effect from 1 April 1980. The items are as follows:

Bath/toilet room fittings and accessories; bags made of polyethylene film of polypropylene film; hot water bottles; portable toilet and attachment; electric hot plates; electric coffee makers; paper for Japanese slide door; bleaching agents for kitchen use and clothes; polishing agents for kitchen use and clothes; polishing agents for household use.

Inquiries: OTAR 01-248 5757 ext. 420/7062.

Further information

In many cases further information on the notices published on these pages is available to British exporters from the Department of Trade. The main branches concerned are: Commercial Relations and Exports (CRE) Divisions, 1 Victoria Street, London SW1H 0ET (tel. direct dialling); and Overseas Tariffs and Regulations Section (OTAR), Export Data Branch, Export Services and Promotions Division, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757. In each case, the relevant information source is indicated at the end of the notice by its initials (OTAR or CRE) and, in the case of OTAR, the telephone extension.

Cartons for Saudi Arabia

Transit cases designed for a new range of four fruit juices produced by Bulmers Ltd for export to Saudi Arabia were produced in only five weeks from receipt of the order by Ashton Containers. The cases for each drink are printed in a different colour and include both English and Arabic wording.

Kenya

Food and drug legislation. Legal notice 55, 28 March 1979, amends from that date certain regulations in the Food, Drugs and Chemical Substances Act of 1 July 1978.

Those regulations affected deal with the labelling of liquid glucose and syrup, concentrated tomato paste, canned or frozen fruit in syrup, jam and corn starch. Corn starch has also been added to the list of substances for which certain additives are permitted in the manufacture of beers.

Inquiries: OTAR 01-248 5757 ext. 472.

Libya

Import licensing. The Secretariat of the Economy announced on 1 April an extension until further notice of the period of granting licences for commodities not within the scope of import monopolies or public establishments or workers take-over companies.

It has also been announced that private sector clothing importers should obtain letters of non-objection from Mr Hassan Busrewil General Commissioner National Company for Clothes Trade and Manufacturing, PO Box 5194, Tripoli.

Inquiries: OTAR 01-248 5757 ext. 462.

New Zealand

Precious stones, metals and carvings. The New Zealand government has issued The Customs Tariff (Diamonds, Other Precious Stones and Semi-precious Stones) Amendment Order 1979 which came into force on 23 March whereby CCCN 71.02, 71.03, 71.15, and 95.05 are amended to read:

CCCN no./Goods	Rates of duty: Normal tariff	Rates of duty: Preferential tariff
71.02 Precious and semi-precious stones, unworked, cut or otherwise worked, but not mounted, set or strung (except ungraded stones temporarily strung for convenience of transport):		
Diamonds:		
009 Other	10	Aul free DC 5
029 Other kinds	10	Aul free DC 5
71.03 Synthetic or reconstructed precious or semi-precious stones, unworked, cut or otherwise worked, but not mounted, set or strung (except ungraded stones temporarily strung for convenience of transport)	10	Aul free DC 5
71.15 Articles consisting of, or incorporating, pearls, precious or semi-precious stones (natural, synthetic or reconstructed):		
001 Pearls, precious or semi-precious stones (natural, synthetic or reconstructed), graded and temporarily strung for convenience of transport)	10	DC 5
011 Cameos, unmounted	10	DC 5
95.05 Worked tortoise-shell, mother of pearl, ivory, bone, horn, coral, (natural or agglomerated) and other animal carving material, and articles of those materials:		
001 Cameos, unmounted	10	Aul free DC 5

Inquiries: OTAR 01-248 5757 ext. 401/468/469.

South Africa

Customs tariff change. The following amendments were published in the South African *Government Gazette*, 20 April 1979:

R.802, CCCN 84.40: Specific provision is made for laundry-drying machines, tumbler type, with a wet mass loading capacity not exceeding 7.5 kg and the rate of duty thereon is increased from 3 per cent (general) and free (preferential) to 25 per cent (general) and 22 per cent (preferential).
R.803, CCCN 84.40.15.90 has been added to the exclusion list of surcharge.

Inquiries: OTAR 01-248 5757 ext. 471/472/473/462.

Thailand

Plasticers and caustic soda. The Thai Board of Investment has issued notice 15/2522 which came into effect on 3 April whereby the following two notices are repealed:
Thai Board of Investment notice 32/2521 (1978) which placed a special fee on the import of plasticers.
Thai Board of Investment notice 15/2521 which placed a special fee on the import of sodium hydroxide (caustic soda).

Inquiries: OTAR 01-248 5757 ext. 401/468/469.

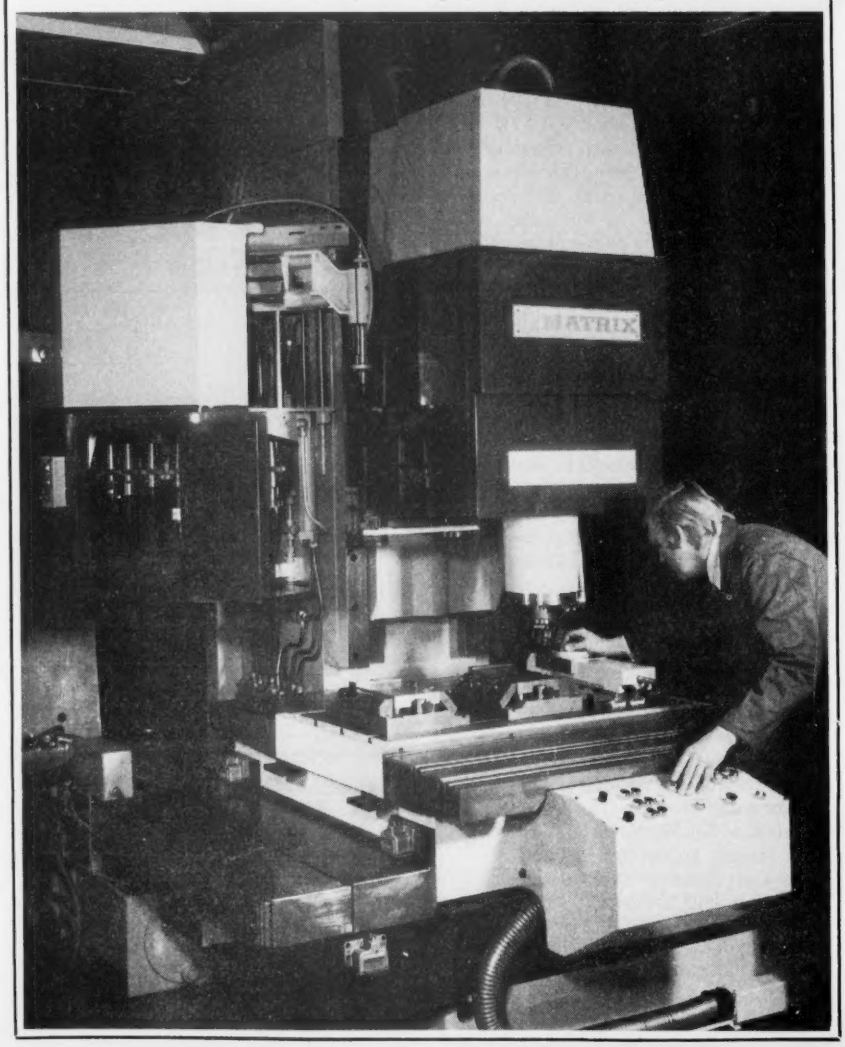
Venezuela

Minimum values. Various Ministerio de Hacienda directions have established reference cif prices for items under tariff headings ex 51.01, ex 51.03, ex 55.05, ex 55.06, ex 56.05, ex 56.06, ex 59.05 and items falling within chapters 60, 61, 62 and within tariff heading ex 83.01.

Inquiries: OTAR 01-248 5757 ext. 474/476.

British machine tool makes European debut at Milan

This tough metal cutting machine recently introduced by TI Matrix of Coventry can be quickly and accurately positioned for high removal rates while still working to close tolerances. The machine will be making its European debut at the third international machine tool exhibition in Milan in October 1979. The Maxicentre V50 CNC three-axis vertical machining centre, is designed for drilling, tapping, boring, milling and contouring. It incorporates microprocessors, and can be supplied with a 30-tool automatic tool changer. Tools can be randomly selected and the next tool indexed into the ready-to-change position while cutting goes on.



European community news

Britain 'no soft touch' Thatcher tells Schmidt

Prime Minister Margaret Thatcher with West German Chancellor Helmut Schmidt in Downing Street on 11 May.

Areas of disagreement between the UK and the rest of the community should be narrowed and not enlarged, Prime Minister Margaret Thatcher said on 10 May.

Speaking at a dinner given in honour of Helmut Schmidt, Chancellor of the Federal Republic of Germany, in Britain for talks with the government, Mrs Thatcher emphasised that the UK's purpose was to engage fully and actively with its partners in developing the community. But she warned that the government would not be a 'soft touch' – it would judge what British interests were and would resolutely defend them.

If policies were working badly, she said, the fact would show up first in the form of unfair consequences for one member or another. When this happened it would be essential for the health and wellbeing of the community as a whole to put the policies right.

For example, on the common agricultural policy the Prime Minister said it was bad for both the UK and the rest of the community for a large part of the EEC's resources to be spent on storing and disposing of unwanted agricultural surpluses. And, Mrs Thatcher said, it was unacceptable to the UK to have to pay the lion's share of the enormous costs of this operation.

There was nothing wrong in finding that after a certain number of years policies needed to be changed to meet new circumstances, and these had to be done by agreement amongst member states.

The UK would be looking therefore to the rest of the community for understanding and goodwill. 'For understanding, because we shall be asking them to take a new look at the way certain policies have worked and not simply to cling to them because they are long established and familiar. For goodwill, because it is hard to accept modifications of policies and arrangements which bring national advantages'.

More community news

Information on European community matters and about member states can often be found in other sections of *Trade and Industry*. For this week's additional news, turn to the following pages:

Overseas trade news

West German fairs 293
Survey of West Germany published 294
Charting the ro-ro revolution 296

Exhibitions

Netherlands fine art fair 303

Country data

Belgium 305

Statistics

Registrations of British, community and foreign films 323

Energy conservation projects offered EEC aid

Nine energy conservation projects throughout the UK are to be offered part of £14 million approved under the EEC scheme for demonstration projects in energy saving.

This follows a decision by energy ministers on 27 March to approve financial assistance for projects which demonstrate significant improvements in the efficiency with which energy is used.

The scheme will be spread over four years and is expected to cost £36 million. It relates to new technologies or new uses of existing technologies which will help to save energy. The commission will now go ahead to negotiate contracts with firms concerned. An invitation for further applications under the EEC scheme is expected to be issued later this year.

A number of projects have been recommended for funding under the United Kingdom's own energy conservation demonstration scheme.

UK applications selected under the EEC scheme for demonstration are: a high temperature heat pump at Pedigree Petfoods, Melton Mowbray, Leicestershire; a fluidised bed combustor at Deborah Fluidised Combustion, Durham: control and monitoring of energy consumption at The Shirley Institute, Didsbury, Manchester; a high efficiency induction heater at The Electricity Council, London; tyre pyrolysis at Batchelor Robinson Metals and Chemicals, Birmingham; heat recovery in swimming pool recreation complex by Darlington Borough Council; mine gas burning facility by Joseph Crosfield and Sons, Warrington; heat recovery in plaster board manufacture by British Gypsum, London; heat recovery in steel making at Bradley and Foster, Darleston, West Midlands.

Firms with projects for consideration under either the UK or the EEC demonstration schemes should contact Dr W. M. Currie at the Energy Technology Support Unit, Harwell, Berkshire, 0235 834621, or, with more general inquiries, Mr P. J. Jonas, Department of Energy, Millbank, London SW1P 4QJ, tel. 01-211 3397.

EEC to provide up to £63m for alternative energy sources

The EEC is to provide up to £63 million over the next five years for the development of alternative sources of energy. Of this, up to £53 million will be available for projects concerned

with gasification and liquefaction of solid fuels, £15 million on geothermal energy and £15 million on solar energy.

The projects funded demonstrate by their example the industrial and commercial viability of alternative energy sources.

The first applications from companies and other organisations to take part in this programme were submitted to the EEC last year. Following agreement at the 27 March meeting of energy ministers the European commission will now negotiate contracts with applicants whose proposals have been shortlisted. Selected proposals will take up only a part of the funds allocated and further opportunities for similar support for other worthwhile alternative energy projects will occur later.

Support for projects using other energy sources may become available later following consideration by the council.

Solar energy

In the solar energy sector, 16 projects from seven member states have been selected for negotiation of contracts and are expected to attract commission support totalling £2.1 million.

One of the projects will be in the UK where Taylor Woodrow Homes Ltd is to build five solar homes. The homes, which will employ conventional building techniques, will each be built to a different design. Energy savings achieved in the homes will be accurately monitored over a period of 40 months and the results compared with predictions. The total cost of the project will be £300,000 of which 40 per cent is expected to be funded by the commission.

In the sector dealing with gasification and liquefaction of solid fuels, four projects costing about £71 million have so far been selected and are expected to receive community support of £10.4 million mostly for their initial phases but also for the early operation of an existing German gasifier.

One of these projects is the National Coal Board's 25 tonnes-per-day supercritical gas extraction project for which the commission is planning support of £3.1 million. In this, coal is dissolved in a high pressure gas and hydrogenated to give petrol and diesel transport fuels and chemical feedstocks.

A proposal by the British Gas Corporation for the development of an advanced gasifier for the production of substitute natural gas has received a favourable opinion from the commission for support in a second round of selection.

Details of the scheme can be found in the *Official Journal of the European Communities*, L158/3 – 5 of 16 June 1978 and L93/2 – 8 of 12 April 1979.

Jenkins calls for coal industry investment and research

New investment and research in the community's coal industry is the keynote for the 1980s and beyond – allied with the crucial need for the community to at least maintain, and preferably increase, the 18.8 per cent share hard coal amounts to in its total supply of primary energy.

This was the theme of a speech given by Roy Jenkins, European commission president, to the consultative committee of the European Coal and Steel Community in Edinburgh on 11 May. He said that last year the commission had granted loans for investment in coalfields amounting to £200 million. He was concerned, nevertheless, that investment in favour of coal consumption had lagged behind the level necessary to ensure a shift from oil to coal, and continued to do so.

Mr Jenkins said that if the EEC was to succeed in breaking out of its relatively low growth pattern – since 1976 amounting to an average annual rate of real gross domestic product growth of only 3.4 per cent – would depend on how the community faced up to the problems of energy supplies.

At present, over half the community's energy requirements were met by oil, of which almost 90 per cent was imported – and this in spite of Britain's increasingly significant offshore production. And, Mr Jenkins pointed out, recent events in Iran and the decision taken by the Organisation of Petroleum Exporting Countries to increase oil prices by a further 9 per cent from the beginning of April, served as a reminder of what had happened in 1973, and confirmed the fragility of the community's energy resources. It underlined the urgent need to make the most effective use of the resources the community had and to exploit new and additional means of supply.

Mr Jenkins outlined the measures which the commission believed were necessary to achieve the production target of 250 million tonnes of coal by 1985 and to increase imports from third countries. These included proposals to encourage the use of coal for electricity generation through investment incentives; to promote intra-community sales of power station coal; to improve current arrangements for coal and coke sales to the steel industry; to lighten the financial burdens on coal producers carrying cyclical stocks: and to provide quarterly information on coal imports for use in community power stations.

Of these five proposals only the last, which involved no financial contribution, had been adopted by the council so far, he said.

Difficulties recognised

He did recognise the difficulties, however. Fewer than half the member states had coal industries of their own and the community's own coal production costs were substantially above the present price at which coal was available on the world market. All this inevitably complicated the debate on the extent to which reliance should be placed respectively on community and imported coal.

Moreover, the commission's proposals necessarily implied a rather uneven financial impact on different member states. Clearly there had to be a reasonable balance of interest between partners but at the same time, he said, the community should guard against looking at each measure merely in terms of immediate costs and benefits.

'Our objective must be to secure supplies of energy on reasonable terms from a variety of sources. That objective demands that we pay particular attention to our own coal resources. And time is now running out. If we do not take positive action soon, going beyond the expression of fine sentiments, we shall all be caught up in a very few years in a permanent and debilitating energy crisis.'

Offshore oil relief grants must end – commission

Preferential interest relief grants awarded to UK suppliers of offshore oil and gas equipment for the North Sea have to stop, the European commission has told the government.

In a letter dated 2 May, the commission has given the government two months in which to amend its scheme. If the relief grants do not end within the time limit the commission will take the UK to the European Court of Justice for a ruling.

The commission's viewpoint is that these grants infringe the treaty of Rome's competition rules because they are available only to British suppliers and therefore discriminate against other community competitors.

The government introduced the grants scheme to reduce the cost of credit necessary to pay for the supply of goods and services to companies developing UK offshore oil and gas resources.

Energy secretary David Howell is considering the commission's letter.

Assistance for hydrocarbon development projects

Projects which are likely to improve the security of the community's energy supplies could qualify for financial assistance from the EEC.

The EEC commission has invited (*Official Journal* C89, 5 April) submissions of suitable technological development projects directly connected with prospecting, producing, storing or transporting hydrocarbons for consideration of support in the form of a repayable subsidy in financial year 1979.

The latest date for receipt of applications by the commission is 31 May.

Further information can be obtained from Mr N. Garthwaite, Community and International Policy Division, Department of Energy, Thames House South, Millbank, London SW1P 4QJ, tel. 01-211 3809.

Foreign affairs and agriculture councils held

Foreign affairs and agriculture councils were held in Brussels on 8 May, and were attended by representatives of the UK government.

The foreign affairs council discussed negotiations for the new African, Caribbean and Pacific states/EEC convention; a European commission report on the general agreement on tariffs and trade multilateral trade negotiations; relations with Turkey; relations with Romania; relations with Japan; new arrangements on generalised preferences in the textile sector; the drafting of programmes for food aid in the form of cereals, milk powder and butter-oil; the definition of the community position for the fifth United Nations Conference on Trade and Development draft supplementary estimates for the European Parliament and Greek representation in the parliament.

The agriculture council discussed proposals concerning wine and potatoes and discussed agriculture structures policy; ethyl alcohol of agricultural origin; and isoglucoes.

Statistics

Economic indicators at a glance
Trade and Industry's new weekly feature, see page 284.

The economy: selected indicators[1]

Series are seasonally adjusted except where shown otherwise

	Gross domestic product (average estimate)	Consumers' expenditure	Fixed capital expenditure			Changes in stocks				Balance of payments		
				of which			of which					
			Total	Manufacturing industry	Distributive and service industries excl. shipping	Total	Manufacturing industry	Wholesalers'	Retailers'	Current balance	Visible balance	Invisible balance
	at 1975 prices		at 1975 prices			at 1975 prices				at current prices		
Base of index Series in Stock level at end-1977	1975	£ million	£ million			34,469	19,995	£ million 4,540	3,181	£ million		
1973	103.3	65 586	21 609	3 504	4 674	2 983	1 336	432	624	−999	−2 383	1 384
1974	101.4	64 212	21 175	3 822	4 605	1 462	1 288	361	−180	−3 591	−5 235	1 644
1975	100.0	63 385	20 488	3 522	3 841	−1 625	−1 221	−249	−100	−1 843	−3 236	1 393
1976	102.9	63 540	20 395	3 345	3 926	260	316	131	13	−1 137	−3 601	2 464
1977	104.9	62 954	19 961	3 573	4 325	978	442	266	29	298	−1 744	2 042
1978	108.1	66 397	20 514	3 848	4 681	962	595	−15	333	254	−1 175	1 429
1976 3rd qtr	103.3	15 934	5 177	849	1 005	163	99	81	46	−411	−1 136	725
4th qtr	104.2	16 007	4 955	856	1 014	259	260	17	27	−315	−966	651
1977 1st qtr	103.8	15 622	4 821	851	1 030	430	235	82	117	−428	−946	518
2nd qtr	104.5	15 551	5 010	879	1 044	293	97	179	4	−297	−779	482
3rd qtr	105.0	15 876	5 057	910	1 103	−70	−6	−80	−59	522	−3	525
4th qtr	106.5	15 905	5 073	932	1 149	325	116	85	−33	501	−16	517
1978 1st qtr	105.9	16 296	5 151	923	1 162	291	38	81	62	−341	−596	255
2nd qtr	108.4	16 487	5 161	963	1 173	280	272	−62	128	146	−173	319
3rd qtr	109.2	16 858	5 147	981	1 161	302	175	45	54	51	−367	418
4th qtr	108.8	16 756	5 055	982	1 184	89	111	−79	89	398	−39	437
1979 1st qtr		16 850										
% change last 2 qtrs on prev. 2 qtrs.	+1.7	+0.7	−1.1	+4.1	+0.4							
on a year earlier	+3.1	+4.4	+0.7	+6.6	+4.1							

	Industrial production		Personal expenditure		Prices and earnings					Labour (UK)				Visible trade (volume)	
	Total all industries	Total manufacturing industries	Retail sales	Cars: new registrations	Retail prices		Wholesale prices: all manufacturing industry		Average gross earnings of all employees (GB, all industries and services covered)	Unemployed excluding school leavers and adult students		Unfilled vacancies for adults		Export	Import
				monthly averages		% increase on a year earlier	basic materials and fuel used	manufactured products: home sales		mid-month count	% of total employees	mid-month count		On a balance of payment basis	
	at 1975 prices		at 1971 prices		(not seasonally adjusted)				(old series)					at 1975 prices	
Base of index £m in base year Series in	1975	1975	1971 16,296	thousands	Jan. 1974		1975	1975	Jan. 1970	thousands		thousands		1975 19,463	1975 22,699
1973	109.5	108.4	110.3	137.1	93.5	9.1	58.8	66.7	152.1	611.0	2.6	307.0		97.7	108.8
1974	105.1	106.5	109.0	102.8	108.5	16.0	86.8	81.8	179.1	599.7[a]	2.6[a]	302.7[a]		104.2	109.7
1975	100.0	100.0	106.7	97.2	134.8	24.2	100.0	100.0	226.6	929.0	3.9	150.0[a]		100.0	100.0
1976	102.0	101.4	106.5	104.7	157.1	16.5	127.0	117.3	261.9	1 269.8[a]	5.4[a]	120.4[a]		109.7	105.6
1977	105.8	102.8	103.6	107.1	182.0	15.8	145.6	140.5	288.5	1 378.1	5.8	155.6[a]		118.9	107.2
1978	109.7	103.6	109.2	129.9	197.1	8.3	144.6	153.3	330.2	1 375.6	5.8	210.3		122.9	112.6
1977 1st qtr	105.6	103.9	103.3	102	174.1	16.5	144.8	133.0	280.0	1 329.5	5.6	..		115.9	108.8
2nd qtr	105.5	102.4	102.4	104	181.9	17.4	148.8	139.6	285.3	1 340.6	5.6	157.7		117.7	110.6
3rd qtr	106.2	103.0	104.2	110	184.7	16.5	146.5	143.8	288.3	1 414.6	5.9	151.9		124.6	107.3
4th qtr	105.8	101.8	104.7	113	187.4	13.1	142.2	145.8	300.4	1 427.8	6.0	160.1		117.3	102.3
1978 1st qtr	107.0	102.2	106.4	128	190.6	9.5	140.2	149.2	310.9	1 409.4	5.9	187.7		119.6	113.5
2nd qtr	110.8	104.5	107.9	133	195.8	7.7	146.3	151.8	327.8	1 372.7	5.7	210.3		122.2	109.7
3rd qtr	111.5	105.1	110.7	133	199.2	7.8	144.9	154.8	335.7	1 380.5	5.8	213.0		124.8	114.9
4th qtr	109.7	102.5	111.7	127	202.6	8.1	147.1	157.3	346.4	1 339.7	5.6	230.3		124.8	112.3
1979 1st qtr			110.3	131	208.9	9.6	152.1 p	161.6 p		1 350.7	5.7	234.6			
1978 Apr	111.1	105.1	106.9	130	194.6	7.9	145.1	150.9	324.1	1 387.1	5.8	203.7		124.3	104.8
May	110.1	103.5	108.2	127	195.7	7.7	146.8	151.9	326.2	1 366.4	5.7	209.9		120.5	113.3
Jun	111.1	105.0	108.6	142	197.2	7.4	147.0	152.7	333.0	1 364.7	5.7	217.4		121.9	111.1
Jul	111.6	105.0	111.0	111	198.1	7.8	145.8	153.8	333.2	1 371.4	5.7	211.0		125.7	114.3
Aug	112.1	105.8	111.7	142	199.4	8.0	144.2	154.8	334.7	1 392.1	5.8	209.3		124.5	111.3
Sep	110.7	104.3	109.6	144	200.2	7.8	144.8	155.7	339.2	1 378.3	5.8	218.7		124.3	119.1
Oct	108.5	101.7	110.2	133	201.1	7.8	145.7	156.6	344.5	1 359.6	5.7	228.4		125.9	110.8
Nov	109.5	102.4	110.5	126	202.5	8.1	147.3	157.1	344.5	1 338.8	5.6	231.3		122.5	113.7
Dec	111.2	103.5	113.8	121	204.2	8.4	148.3	158.3	350.1	1 320.7	5.5	231.2		126.0	112.5
1979 Jan	103.0 p	93.4 p	109.6	121	207.2	9.3	150.8	160.0	344.7	1 339.1	5.6	235.9		113.1	107.3
Feb	110.4 p	103.8 p	110.4	117	208.9	9.6	152.0	161.7	355.4	1 362.5	5.7	230.9			
Mar			110.8	156	210.6	9.8	153.3 p	163.1 p		1 350.4	5.7	237.0			
Apr					214.2	10.1	157.6 p	165.3 p		1 310.9	5.5	249.7			
% change latest 3 months on prev. 3 months	−1.3	−2.5	−1.3	+3.7	+3.2		+3.7	+3.1	+2.1	+0.6		+2.7		−3½	−2
on a year earlier	+1.2	−2.0	+3.7	+2.3	+9.8		+8.7	+8.9	+13.9	−4.1		+22.4		+5	+5½

p Provisional. e Estimate. [1] Including figures published on or before 17 May 1979. [a] Average of available months.

Inquiries: 01-215 3453

Retailers' stocks in March

Based on the non-seasonally adjusted data on table 1, the level of stocks at book values in March was £519 million higher than in the previous month and 20 per cent higher than in the same month a year earlier; at constant (1975) prices it was 11 per cent higher than a year earlier.

The estimate of the value of physical increase of retailers' stocks at 1975 prices and seasonally adjusted (table 2) suggests an increase of £186 million as compared with the previous month. This rather large change may reflect a bunching of deliveries to retailers in the aftermath of the lorry drivers' dispute. As a consequence of this movement, the ratio of stocks to retail sales (table 3) rose sharply in March when the seasonally adjusted volume of retail sales was little changed.

Inquiries: Department of Trade, Economics and Statistics Division 6C, Room 351, Sanctuary Buildings, 20 Great Smith Street, London SW1P 3DB, tel. 01-215 3705.

Table 1 Level of retailers' stocks

£ million — At cost at end of month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
At book values												
1975	2 766	2 814	2 947	2 856	2 948	2 985	2 962	2 963	3 139	3 452	3 700	3 333
1976	3 151	3 195	3 388	3 389	3 382	3 379	3 311	3 319	3 547	3 941	4 229	3 799
1977	3 656	3 726	4 095	4 163	4 165	4 220	4 029	4 037	4 286	4 695	5 170	4 417
1978	4 197	4 220	4 522	4 597	4 625	4 744	4 637	4 658	4 932	5 458	6 004	5 218
1979	4 812	4 897	5 416									
Change in book values												
1975	−120	48	133	−91	92	37	−23	1	176	313	248	−367
1976	−182	44	193	1	−7	−3	−68	8	228	394	288	−430
1977	−143	70	369	68	2	55	−191	8	249	409	475	−753
1978	−220	23	302	75	28	119	−107	21	274	526	546	−786
1979	−406	85	519									
Percentage change on a year earlier												
1975	15	17	17	10	10	10	10	11	13	14	16	15
1976	14	14	15	19	15	13	12	12	13	14	14	14
1977	16	17	21	23	23	25	22	22	21	19	22	16
1978	15	13	10	10	11	12	15	15	15	16	16	18
1979	15	16	20									
At constant (1975) prices – percentage change on a year earlier												
1975	−7	−6	−7	−12	−12	−11	−11	−10	−7	−5	−3	−3
1976	−2	−2	—	5	2	1	1	1	1	2	1	—
1977	1	1	4	5	5	6	3	3	3	2	5	1
1978	1	1	−1	—	1	3	6	6	7	8	8	10
1979	7	8	11									

Table 2 Retailers' stocks at 1975 prices

Seasonally adjusted — £ million

	Stocks level	Value of physical increase
1971		
1st qtr	2 720	−34
2nd	2 722	2
3rd	2 738	16
4th	2 766	28
1972		
1st qtr	2 776	10
2nd	2 834	58
3rd	2 809	−25
4th	2 795	−14
1973		
1st qtr	2 934	139
2nd	3 248	314
3rd	3 323	75
4th	3 419	96
1974		
1st qtr	3 356	−63
2nd	3 409	53
3rd	3 315	−94
4th	3 239	−76
1975		
1st qtr	3 134	−105
2nd	3 039	−95
3rd	3 079	40
4th	3 139	60
1976		
1st qtr	3 146	7
2nd	3 079	−67
3rd	3 125	46
4th	3 152	27
1977		
1st qtr	3 269	117
2nd	3 273	4
3rd	3 214	−59
4th	3 181	−33
1978		
1st qtr	3 243	62
2nd	3 371	128
3rd	3 425	54
4th	3 514	89
1979		
1st qtr	3 601	87
1979		
January	3 421	−93
February	3 415	−6
March	3 601	186

Table 3 Relationship of retailers' stocks to retail sales

Index numbers – fourth quarter 1974 = 100 — Seasonally adjusted

	Stock levels at 1975 prices	Retail sales at 1971 prices	Ratio of stocks to sales
1966	77	83	93.6
1967	80	84	94.5
1968	84	87	95.9
1969	85	88	97.5
1970	85	90	94.8
1971	85	91	93.7
1972	86	96	89.9
1973	106	100	105.0
1974	100	99	100.7
1975	97	97	99.7
1976	97	97	100.3
1977	98	94	104.0
1978	108	99	109.0
1976			
1st qtr	97	96	100.7
2nd	95	97	97.8
3rd	96	98	98.8
4th	97	97	100.7
1977			
1st qtr	101	94	107.2
2nd	101	93	108.3
3rd	99	95	104.5
4th	98	95	103.0
1978			
1st qtr	100	97	103.3
2nd	104	98	105.9
3rd	106	101	104.8
4th	108	102	106.6
1979			
1st qtr	111	100	110.6
1979			
January	106	100	105.8
February	105	101	104.8
March	111	101	110.1

Notes for table 3

1 The index numbers of the level of stocks relate to the end of each time period; the index of sales refers to retail sales during the period.

2 The 1971 = 100 index of retail sales has been rebased on the fourth quarter of 1974 for the purpose of this table.

3 The index numbers of the stocks sales ratio are calculated from unrounded estimates of the data in the previous two columns.

Notes

1 The book values are valued exclusive of VAT.

2 For the estimates at constant prices, it should be borne in mind that, when price increases are large, the various problems associated with revaluation of the value series to constant prices become more acute. Thus the relative accuracy with which constant price changes have been measured is likely to have been reduced in recent periods.

3 The statistics given in table 2 were introduced in an article in *Trade and Industry*, 28 March 1975, and those in table 3 were introduced in an article in the issue of 17 March 1978.

4 Long-run series back to 1970 for table 1 and to 1967 for table 2 were included in the article in *Trade and Industry*, 22 September 1978.

What is 'Financial Statistics'?

Financial Statistics is a monthly publication by the Central Statistical Office and the source of many figures used in articles by financial journalists and in stockbrokers' circulars. It brings together the key financial and monetary statistics of the United Kingdom.

Financial Statistics is the prime source of detailed UK quarterly *financial accounts*. These include all recorded financial flows between sectors of the economy and bring a sense of proportion to the statistics of the different types of financial institutions and the various savings media.

Financial Statistics contains *up-to-date information* on government accounts, public sector borrowing requirement, money stock, domestic credit expansion, company liquidity, interest rates and security prices.

An **Explanatory Handbook for Financial Statistics** has been published. It contains notes and definitions which add to the understanding of all the tables, and explains the relationship between them. The handbook is included in the annual subscription charge, or can be obtained separately (£1.50 net). The second edition will be available in April 1979.

Price £3.40. Annual subscription including explanatory handbook and postage £46.36.

Check trading in 1978

Check trading: value of checks issued and amounts outstanding 1975-78 £ million

	Value of checks issued			Value of checks issued		
	Unadjusted	Seasonally adjusted	Amount outstanding	Unadjusted	Seasonally adjusted	Amount outstanding
	1975			1976		
January	8.5	13.8	150.8	6.9	13.7	149.6
February	10.4	14.6	148.1	9.9	13.6	144.1
March	14.6	14.4	143.0	12.4	12.4	133.2
April	11.8	13.3	140.4	13.0	14.5	133.6
May	14.1	14.0	141.0	13.7	13.7	133.7
June	13.4	12.8	139.2	15.0	14.5	132.7
July	10.9	13.2	138.4	11.3	13.6	130.3
August	10.3	13.5	138.9	10.2	13.5	133.5
September	13.7	13.2	134.5	14.6	14.1	129.9
October	13.5	14.0	136.5	13.6	14.2	132.4
November	13.4	13.5	141.9	17.6	14.3	139.8
December	26.1	13.4	154.4	28.3	14.4	149.3
Year	163.7			166.5		
	1977			1978		
January	8.1	16.0	144.3	8.1	15.9	134.1
February	10.4	14.2	142.5	10.6	14.3	133.6
March	12.3	12.4	128.1	15.3	15.4	120.9
April	12.7	14.1	130.7	13.3	14.6	124.8
May	13.3	13.2	131.3	14.3	14.1	126.4
June	12.6	12.1	129.3	15.2	14.8	123.7
July	12.0	14.2	129.0	11.3	13.3	123.9
August	10.1	13.2	124.7	11.6	15.3	126.6
September	14.3	13.6	120.1	16.0	15.2	122.4
October	12.4	12.8	121.4	14.0	14.5	124.1
November	17.8	14.3	128.6	19.7	15.8	140.0
December	28.4	14.2	136.6	27.6	13.8	144.3
Year	164.3			177.0		

During 1978, the value of checks issued (including charges) is estimated to have been £177 million, about 8 per cent more than in 1977. These statistics are based on the results of the 1971 census of distribution, as are all statistics given in the table accompanying this article. The first official statistics on check trading were published in *Trade and Industry* on 12 August 1977 and updated on 7 April 1978.

Debt outstanding on checks at the end of 1978 is estimated to have been £144 million, about 6 per cent more than a year earlier.

These statistics relate only to the check trading element of the business carried out by check issuing houses. Both the check and non-check business of check traders is now included in the monthly statistics of hire purchase and other credit business published regularly in *Trade and Industry* (see 11 May issue).

Inquiries: Departments of Industry and Trade, Economics and Statistics Division 6a, Room 349, Sanctuary Buildings, 20 Great Smith Street, London SW1P 3DB, tel. 01-215 3162.

Index of retail prices for April

The index of retail prices for all items for 10 April 1979 was 214.2 (15 January 1974 = 100). This represents an increase of 1.7 per cent on March 1979 (210.6) and of 10.1 per cent on April 1978 (194.6).

The rise in the index in April was due mainly to increases in domestic rates and rents and in charges for water supply and environmental services; to increases in petrol prices and other motoring costs; to increases in the prices of alcoholic drinks, vegetables and other foods; to increases in charges for canteen and restaurant meals; and to increases in the prices of a number of miscellaneous goods.

The movements for the main groups in the index are shown in table 2.

Notes

1 The retail prices index measures the change from month to month in the average level of prices of goods and services purchased by most households in the United Kingdom. The expenditure pattern on which the index is based is revised each year using information from the family expenditure survey. The expenditure of certain higher income households and households of retired people dependent mainly on social security benefits is excluded.

2 The index covers a large and representative selection of nearly 350 separate goods and services, for which price movements are regularly measured in more than 200 towns throughout the country. Approximately 150 000 separate price quotations are used each month in compiling the index.

3 Seasonal variations in the index of retail prices are due largely to a very few items of 'seasonal food', that is those items of food the prices of which show significant seasonal variations. These items account for less than 5 per cent of total retail expenditure. If the variation caused by these items is removed, the underlying trend of the figures can be seen more clearly.

4 Rates of change of indices can be calculated over periods of any length. However, rates calculated over periods as long as 12 months are slow to detect changes in trend, while calculations over periods as short as three months give rather volatile results. To help in assessing trends, rates of changes in the all items index and the index for all items except seasonal food are shown in table 1 over successive periods of six months.

5 The index is given in full in the *Department of Employment Gazette*.

Inquiries: Watford 28500 ext. 630.

Table 1 **Index of retail prices**

	All items				All items except seasonal foods		
	Index 15 Jan 1974 = 100	Percentage change over			Index 15 Jan 1974 = 100	Percentage change over	
		1 month	6 months	12 months		1 month	6 months
1978							
November	202.5	+0.7	+3.5	+8.1	203.8	+0.7	+3.9
December	204.2	+0.8	+3.5	+8.4	205.1	+0.6	+4.0
1979							
January	207.2	+1.5	+4.6	+9.3	207.3	+1.1	+4.3
February	208.9	+0.8	+4.8	+9.6	209.1	+0.9	+4.3
March	210.6	+0.8	+5.2	+9.8	210.6	+0.7	+4.6
April	214.2	+1.7	+6.5	+10.1	214.0	+1.6	+5.7

Table 2 **Index of retail prices: commodity breakdown**

	Indices (15 Jan 1974 = 100)		Percentage change over the month
	13 Mar 1979	10 Apr 1979	
All items	210.6	214.2	+1.7
All items excluding food	207.9	212.1	+2.0
Food	220.2	221.6	+0.6
Seasonal food	215.3	221.6	+2.9
Other food	221.3	221.9	+0.3
Alcoholic drink	203.9	206.7	+1.4
Tobacco	231.5	231.9	+0.2
Housing	192.7	205.0	+6.4
Fuel and light	236.3	237.2	+0.4
Durable household goods	191.8	193.3	+0.8
Clothing and footwear	180.1	180.8	+0.4
Transport and vehicles	223.8	227.6	+1.7
Miscellaneous goods	220.2	225.6	+2.5
Services	203.9	205.4	+0.7
Meals out	221.7	225.4	+1.7

Wholesale price indices in April

Output prices

The provisional price index for the home sales of manufactured products increased by 1½ per cent between March and April to 165.3 (1975 = 100).

The index for manufactured products other than food, drink and tobacco was 1½ per cent higher than the March figures as a result of increases spread across most sectors, with higher prices for petroleum products again making the most significant contribution. This index rose 4 per cent in the latest three months.

Higher prices for corrugated fibreboard packing cases made the most significant contribution to the 2½ per cent increase in the index for the paper industries. This index rose by 4 per cent in the latest three months.

More than three-quarters of the 1½ per cent increase in the index for the metal industries arose from higher prices for steel and, to a lesser extent, for iron castings.

Higher prices for scientific and industrial instruments accounted for most of the ¾ per cent increase in the index for the instrument engineering industry. In other parts of the engineering industry, eg mechanical engineering with a 2 per cent increase and electrical engineering with a 1½ per cent increase, the price rises were spread over a number of items.

Higher prices for door sets, leaves and frames, and window frames made the most significant contribution to the 1¼ per cent increase in the index for the timber industries. This index rose by 3¾ per cent in the latest three months.

Almost three-quarters of the 1 per cent increase in the index for the clothing and footwear industries was accounted for by higher prices for footwear and women's and girls' light outerwear.

Higher prices for animal feeding stuffs and chocolate confectionery accounted for more

More about wholesale price indices

General inquiries and tables 1, 1a and 2	**01-215 3073 01-215 3544**
Table 3	
SIC Orders	
II-VI and XII	**01-215 5216**
VII-IX and XVI	**01-215 3549**
XI, XIII-XV and XVII-XIX	**01-215 3548**
Tables 4 and 5	**01-215 3173**

Correspondence: Departments of Industry and Trade, Economics and Statistics Division 4, Room 249, Sanctuary Buildings, Great Smith Street, London SW1P 3DB.

Table 1 Price index numbers of materials and fuel purchased

1975 = 100

1968 SIC Orders or MLH Numbers		1978 1st qtr	1978 2nd qtr	1978 3rd qtr	1978 4th qtr	1979 1st qtr p	1978 Apr	1978 Sep	1978 Oct	1978 Nov	1978 Dec	1979 Jan	1979 Feb	1979 Mar p	1979 Apr p
Orders III to XIX	Materials and fuel purchased by manufacturing industry:	140.2	146.3	144.9	147.1	152.1	145.1	144.8	145.7	147.3	148.3	150.8	152.2	153.3	157.6
	Materials [1]	139.5	145.5	143.8	146.2	151.6	144.1	143.7	144.7	146.5	147.5	150.3	151.8	152.7	157.0
	Coal (except for carbonising), gas and electricity	145.5	152.9	152.8	153.0	154.0	152.9	152.8	153.0	153.0	153.1	153.1	153.0	155.8	159.9
Orders IV to XIX	Materials and fuel purchased by manufacturing industry, other than food, drink and tobacco manufacturing industries	134.2	141.5	139.2	140.9	146.5	140.2	139.1	139.8	141.5	141.3	144.6	146.9	148.1	154.3
	Materials [1]	132.1	139.3	136.6	138.6	145.0	137.8	136.4	137.3	139.3	139.1	142.9	145.7	146.5	153.1
Order III	Materials and fuel purchased by the food, drink and tobacco manufacturing industries	151.1	155.2	156.4	159.1	163.0	153.6	156.3	157.5	158.6	161.2	162.6	162.6	163.7	164.7
	Materials and fuels purchased by selected broad sectors of industry														
211 to 229	Food manufacturing industries	153.7	157.0	157.2	160.8	164.2	156.0	157.6	159.0	160.3	163.1	164.4	163.7	164.6	165.4
	Materials	153.7	157.0	157.3	161.0	164.4	156.0	157.7	159.1	160.5	163.4	164.7	163.9	164.7	165.5
	Fuel [2]	152.1	155.9	155.9	156.0	158.3	155.9	155.9	156.0	156.0	156.1	156.1	158.4	160.5	164.4
211 to 229 (excluding MLH 219)	Food manufacturing industries (excluding animal and poultry foods)	153.8	156.2	157.5	161.1	164.0	154.9	158.3	159.4	160.6	163.4	164.5	163.5	164.1	165.1
Order V	Chemicals and allied industries	149.0	153.4	153.2	155.3	161.0	153.0	153.6	155.0	155.1	155.7	157.8	162.0	163.2	164.8
311 and 312	Steel industries	141.2	145.7	146.7	148.8	153.2	145.0	147.6	148.3	148.7	149.4	150.7	152.4	156.4	157.4
321 to 323	Non-ferrous metals industry	135.5	142.3	146.7	155.6	171.5	140.3	150.2	155.0	155.2	156.6	161.5	173.7	179.2	179.2
Order VII (excluding MLH 342)	Mechanical engineering industries	148.1	152.5	155.8	159.3	162.8	151.6	157.1	158.5	159.5	160.0	161.1	163.1 p	164.3	166.6
Order IX	Electrical engineering industries	143.4	148.3	151.2	155.2	163.4	146.9	152.6	154.4	154.9	156.2	159.2	164.0	166.9	168.9
Order X	Shipbuilding and marine engineering industries [3]	143.9 r	148.4 r	151.3 r	154.5 r	158.7	147.4 r	152.2 r	153.5 r	154.6 r	155.3 r	157.3	158.8	159.9	162.0
Order XII	Metal goods industries	147.8	152.6	155.5	159.1	163.8	151.5	156.7	158.3	159.2	159.7	161.3	164.3	165.9	167.8
Order XIII	Textile industries	140.8	145.4	146.1	149.6	154.1	144.7	146.7	148.3	149.5	150.9	152.1	154.2	156.1	157.6
Order XV	Clothing and footwear industries	139.5	142.3	144.9	148.4	154.0	141.6	145.9	147.7	148.0	149.4	152.4	153.0	156.5	159.1
461, 464 and 469	Bricks, cement etc, industries	148.6	152.9	154.5	157.2	163.0	152.0	154.8	156.3	157.4	158.0	160.3	163.0	165.8	168.2
462 and 463	Pottery and glass industries	155.3	158.6	160.2	163.3	167.1	157.7	160.6	162.9	163.2	163.7	165.2	167.4	168.7	171.5
Order XVII	Timber industries	146.1	147.0	150.7	153.4	159.0	146.2	151.8	152.6	153.4	154.2	156.3	158.6	162.2	165.7
481 to 484	Paper industries	117.5	120.6	120.2	124.8	129.5	120.1	119.8	123.9	125.6	125.0	128.8	129.6	130.0	132.9
Order XX	Construction materials	153.0	156.6	159.7	162.9	168.6	155.5	160.6	161.9	163.0	163.8	166.4	168.4	171.1	173.9
Part of Order XX	House building materials	152.5	156.2	159.8	163.0	168.5	155.0	160.9	161.8	163.0	164.1	166.4	168.4	170.8	173.6

[1] Includes crude oil and coal for carbonising. [2] Includes petroleum products. [3] This index has been revised back to January 1974; the revised series can be obtained on request. As originally published on rebasing, the index included marine engines as an input. However, under the net sector rules of calculation, the prices of marine engines should not have been included. The new index is therefore the same as its predecessor in all respects save the exclusion of price movements for engines. The series including engines is also available on request. p Provisional. r Revised.

Table 1a Price index numbers of materials and fuel purchased by selected sectors of industry

1975 = 100

1968 SIC		1978 1st qtr	1978 2nd qtr	1978 3rd qtr	1978 4th qtr	1979 1st qtr p	1978 Apr	1978 Sep	1978 Oct	1978 Nov	1978 Dec	1979 Jan	1979 Feb	1979 Mar p	1979 Apr p
361	Electrical machinery industry	145.5	149.4	152.5	155.6	161.7	148.5	153.7	154.7	155.6	156.6	159.4	162.0 p	163.8	166.4
362	Insulated wires and cables industry	136.2	142.8	145.3	149.7	163.9	140.4	146.7	148.6	149.0	151.6	156.2	164.9	170.7	172.2
364	Radio and electronic components industry	144.8	148.5	151.5	155.3	161.3	147.7	153.0	154.9	155.3	155.8	158.5	161.8	163.6	166.2
368	Domestic appliances industry	149.1	152.1	155.4	158.6	162.6	151.5	156.6	157.8	158.7	159.2	160.9	162.8 p	164.2	166.6
369	Electrical goods industries n.e.s.	145.9	149.7	153.0	157.3	163.6	148.7	154.6	156.4	157.3	158.1	160.7	164.0 p	166.2	168.3
381	Motor vehicle industry	148.4	152.6	156.1	159.1	163.1	151.6	157.2	158.2	159.3	159.7	161.0	163.5	164.7	166.8
411	Man-made fibres industry	134.1	137.1	137.4	140.8	146.1	137.0	137.8	140.4	140.8	141.1	144.2	146.1	148.0	151.3
414	Woollen and worsted industry	139.2	150.5	154.3	158.0	165.8	145.3	153.6	153.0	157.9	163.2	163.7	166.3	167.5	166.2
422/1	Household textiles and handkerchiefs industry	140.9	143.7	146.5	149.6	153.2	142.5	147.4	148.8	149.6	150.3	151.8	153.0	154.7	158.1
450	Footwear industry	136.5	139.3	142.2	148.9	158.2	138.5	143.4	147.6	148.2	150.9	155.3	156.2	163.0	165.3
481	Paper and board making industry	115.2	118.5	118.0	123.1	127.3	118.0	117.6	122 1	123.9	123.2	127.0	127.4	127.4	130.1

p Provisional.

than half of the 1 per cent increase between March and April in the index for the food manufacturing industries. This index increased by 2 per cent in the latest three months.

The change in the index for all manufactured products measured over a 12-month period increased from 8¾ per cent to 9½ per cent. The increase in the index over the latest six months rose from 4¾ per cent to 5¼ per cent.

Input prices

The provisional price index for materials and fuel purchased by manufacturing industry increased by 2¾ per cent between March and April to 157.6 (1975 = 100). This index rose by 8½ per cent over the last 12 months.

The 2¾ per cent monthly increase in the index for coal, gas and electricity was entirely due to higher prices for electricity.

The 4½ per cent monthly increase in the index for materials purchased by manufacturing industry other than the food, drink and tobacco industries was caused by the sharp increase in crude oil prices introduced on 1 April. Excluding crude oil the index fell by ½ per cent: the prices of a number of commodities fell as a result of the appreciation of sterling.

The higher charges for electricity were reflected in many of the indices of materials and fuel for individual industry sectors in April. They accounted for more than half of the ¾ per cent increase in the index for the steel industries and were also the main contributor to the 1¾ per cent and 1½ per cent increases in the indices for the pottery and glass industries and the bricks, cement, etc, industries respectively. Higher prices for electricity and petroleum products also contributed most to the 1 per cent increase in the index for the chemical and allied industries with lower prices for silver slightly reducing that increase.

More than half of the 2¼ per cent increase in the index for the paper industries was accounted for by higher prices for imported woodpulp. Higher prices for imported softwood and plywood and blockboard accounted for more than half of the 2¼ per cent increase in the index for the timber industries. This index rose by 6 per cent in the latest three months.

Higher prices for imported and home-produced steel were responsible for most of the 1¼ per cent increase in the index for the metal goods industry and almost half of the 1½ per cent increase in the index for the mechanical engineering industries.

Lower prices for lead, titanium and cobalt, offset mainly by higher prices for electricity and nickel, resulted in no change in the index for the non-ferrous metals industry. This lack of change between March and April contrasts with a 14½ per cent increase over the period from December to March.

The index for materials purchased by the food manufacturing industries increased by ½ per cent between March and April. Higher prices for packaging products accounted for more than half of the increase.

Notes on wholesale price indices

1 Detailed notes on index numbers of wholesale prices were last shown in *Trade and Industry*, 27 April 1979.

2 The index numbers are constructed on a net sector basis. This is to say, the price movements used to compile the index for a particular sector of industry are only those relating to transactions between the sector and other sectors. Transactions between undertakings in the same sector are excluded. Thus index numbers for the whole of manufacturing industry are not weighted averages of sector index numbers.

3 All the index numbers are compiled exclusive of value added tax and (before its abolition) of purchase tax. Revenue duties (on cigarettes and manufactured tobacco, alcoholic liquor, matches and mechanical lighters) are included. The duty on hydrocarbon oils is excluded from output price series that cover these products (unless specifically noted to the contrary) but is included in series for materials and fuel purchased by sectors of industry.

4 Firm and provisional indices, at all levels of aggregation, include imputation for items for which there is no current price information. Additional provisional figures will be published for those indices where there are insufficient returns to allow accurate imputation.

5 Revisions to firm index numbers will only be made if they are significant. These revisions will be notified when the series are next published.

6 Some indices in tables 3 and 4 were only published at intervals of four months on base 1970 = 100. Commencing in December 1978 all available indices on base 1975 = 100 are published every month.

7 Where extension of indices on base 1970 = 100 is required for contract purposes the multiplication factors and explanatory notes are shown in *Trade and Industry* 15 December 1978.

More about wholesale prices

01-215 3544 tables 1, 1a and 2
01-215 3549 table 3
01-215 3173 tables 4 and 5

Table 2 **Price index numbers of output (home sales)**

1975 = 100

1968 SIC Orders or MLH numbers		1978				1979	1978					1979			
		1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr p	Apr	Sep	Oct	Nov	Dec	Jan	Feb	Mar p	Apr p
Orders III to XIX	Output of manufactured products	149.2	151.8	154.8	157.3	161.6	150.9	155.7	156.6	157.1	158.3	160.0	161.7	163.1	165.3
Orders IV to XIX	Products of manufacturing industries other than food, drink and tobacco manufacturing industries	146.6	149.4	152.3	155.2	160.0	148.5	153.3	154.5	155.2	156.0	158.1	160.1	161.8	164.4
	Output of selected broad sectors of industry														
211 to 229	Food manufacturing industries	157.2	160.1	163.7	165.7	169.8	158.8	164.4	164.7	164.9	167.6	168.9	170.0	170.5	172.2
211 to 229 (excluding MLH 219)	Food manufacturing industries (excluding animal and poultry foods)	159.2	162.1	165.3	167.7	171.3	161.0	166.2	166.7	166.7	169.6	170.7	171.4	171.9	173.1
Order V	Chemicals and allied industries	141.2	142.8	144.2	146.7	152.1	142.5	144.9	145.8	146.9	147.5	149.9	151.9	154.5	158.5
Order VI	Metal manufacturing	149.8	152.7	156.6	160.4	166.1	151.6	157.8	159.2	160.5	161.5	163.1	166.2	169.1	171.7
311 and 312	Steel industries	150.6	152.8	156.6	158.7	160.8	152.6	157.4	157.8	158.9	159.3	159.7	160.9	161.8	164.0
Orders VII to XII	Engineering and allied industries	147.5	151.0	154.8	158.4	163.3	149.8	156.0	157.2	158.1	159.8	162.3	163.3 p	164.3	166.7
Order VII (excluding MLH 342)	Mechanical engineering	147.7	150.7	154.4	158.2	163.5	150.0	155.9	157.0	157.8	159.7	162.5 p	163.5 p	164.4	167.5
Order VIII	Instrument engineering	145.8	147.2	149.4	152.7	158.6	146.9	149.9	151.8	152.1	154.3	157.1	159.3 p	159.5	160.7
Order IX	Electrical engineering	139.4	142.9	145.2	148.7	152.2	141.6	146.1	147.7	148.8	149.6	151.3	152.0 p	153.2	155.6
Order XI (excluding MLH 383)	Vehicles	157.0	160.0	165.5	168.6	174.0	158.7	165.9	166.6	168.3	170.9	173.4	174.1	174.5	175.7
Order XII	Metal goods industries n.e.s.	150.5	155.6	159.9	164.2	169.5	154.5	162.6	163.6	164.1	164.8	167.3 r	169.7	171.6	174.1
Order XIII	Textile industries	143.0	145.5	148.9	151.3	155.9	145.0	150.4	150.8	151.2	151.8	154.4	155.8	157.5	159.2
Order XV	Clothing and footwear	138.4	140.8	144.3	147.9	152.1	139.7	145.8	147.2	148.1	148.5	151.5	152.2	152.7	154.1
441 to 445 and 449	Made-up clothing	137.0	139.3	142.9	146.6	150.4	138.4	144.5	145.9	146.8	147.2	149.7	150.5	151.0	152.1
461, 464 and 469	Bricks, cement etc, industries	160.1	166.2	170.3	173.3	179.3	164.8	171.2	172.9	173.1	173.8	177.1	179.2	181.6	183.4
462 and 463	Pottery and glass industries	151.9	155.4	158.3	163.7	166.0	155.0	159.5	163.5	163.9	163.7	165.1	166.4	166.6	167.1
Order XVII	Timber industries	144.4	145.8	148.9	151.3	156.8	145.4	150.1	150.4	151.4	152.2	154.7	157.2	158.6	160.4
481 to 484	Paper industries	132.4	133.5	134.5	138.2	141.9	133.2	134.7	137.5	138.0	139.0	141.1	141.6	143.0	146.7

p Provisonal r Revised

Table 3 Commodities produced in the United Kingdom

1975 = 100

1968 SIC order or MLH and industry	1978 Apr	1979 Jan	Feb	Mar p	Apr p
II Mining and quarrying					
101 **Coal**	150.9	154.7	154.7	168.6	168.6
102 **Stone and slate quarrying and mining**	164.2	179.3	180.3 p	82.7	183.3
Stone quarrying and mining					
Limestone and dolomite	171.4	188.6	189.4 p	191.9	192.8
Uncoated limestone roadstone and aggregates	157.0	171.3	173.4	173.4	174.5
Coated limestone roadstone	166.2	180.1	180.3	187.0	187.2
Granite	150.7	162.2	162.4	164.5	164.7
Granite and other chippings, aggregates and roadstone	143.9	159.3	159.8	159.5	159.6
Granite and other chippings	147.2	157.6	158.3	157.9	158.7
Coated granite and whinstone roadstone	155.2	164.0	164.2	167.8	168.0
Slate quarrying and mining					
Roofing slates	184.7	204.4	225.2	228.6	228.6
103 **Chalk, clay, sand and gravel extraction**	173.1	189.0	194.8	197.3	199.0
Sand and gravel (uncoated)	200.6	215.4	225.7	230.4	232.4
Sand and gravel (ex-pit or works)	202.0	216.7	225.7	232.2	234.3
Sand and gravel (delivered)	178.7	188.3	199.3	205.1	207.2
Clay, brick, earth, marl and shale					
China clay	141.4	158.5	159.1	159.1	160.4
109 **Other mining and quarrying**	173.2	182.4 p	184.0 p	194.5	194.8
109/3 **Salt**	189.4	198.9	198.9	215.3	214.7
III Food, drink and tobacco					
231 **Brewing and malting**	148.8	149.3	152.6	154.2	156.5
240 **Tobacco**	156.0	161.2	161.4	161.4	161.4
IV Coal and petroleum products					
261 **Coke ovens and manufactured fuel**					
Foundry coke	152.5	152.5	152.5	161.1	166.1
262 **Mineral oil refining**					
Motor spirit (including duty) [1]	130.9	130.9	133.8	135.6	139.7
Gas/diesel oil (including duty) [1]	166.0	166.2	172.4	176.3	181.7
Gas oil fuel (including duty) [1]	168.6	168.6	175.8	180.5	186.7
Derv (including duty) [1]	160.3	160.3	163.9	166.0	169.4
Medium fuel oil (950 seconds including duty) [1]	169.5	169.5	174.1	177.1	179.1
V Chemicals and allied industries					
271 **General chemicals**	143.9	155.1 p	156.9 p	160.7	167.2
271/1 **Inorganic chemicals**	152.7	161.6 p	162.0 p	162.4	167.0
Inorganic acids and oxygen compounds of non-metals	132.0	139.0 p	139.5 p	139.7	141.1
Metallic oxides, hydroxides, peroxides and other inorganic bases	154.6	162.5	163.7	164.5	167.6
Metallic salts and peroxy salts of inorganic acids	153.5	162.6	163.0	163.9	170.8
Soda ash	166.1	177.5	177.5	177.5	181.9
Metallic salts and peroxy salts of inorganic acids-other than soda ash	150.1	158.6	159.2	160.3	167.8
271/2 **Organic chemicals**	137.1	153.2	156.2	161.6	169.3
Hydrocarbons other than products of coal tar etc	125.7	161.3	165.0	169.0	172.5
Halogenated, sulphonated, nitrated or nitrosated derivatives of hydrocarbons	152.6	161.5	161.8	164.6	168.3
Alcohols, phenols and pheno-alcohols	129.0	140.9	146.5	151.9	170.0
Nitrogen function compounds	140.2	139.3	139.8	151.4	158.0
271/3 **Other chemicals**					
Bleaching materials	176.2	192.2	192.2	194.2	204.1
Plasticisers, mixed or unmixed	127.8	128.9	136.8	147.3	153.8
272 **Pharmaceutical chemicals and preparations**					
Pharamaceutical chemicals					
—central nervous system	168.3	177.5	178.3	179.2	182.6
Pharmaceutical preparations	152.0	160.1p	161.6 p	162.0	163.1
Medical preparations					
—central nervous system	169.9	182.4	185.5	185.6	187.9
Anaesthetics	140.4	146.0	146.0	146.0	146.0
Analgesics	162.8	171.1	177.3	177.5	181.0
Psycho analeptics	177.3	182.3	182.3	182.3	182.3
—cardiovascular system	169.5	172.7	175.0	175.0	176.6
Plain hypotensives	170.7	171.2	171.2	171.2	171.2
—respiratory system	177.1	179.4	183.2	183.3	183.3
Cough and cold preparations	175.2	179.9	188.6	188.6	188.6
—alimentary tract and nutrition	138.1	152.7 p	152.8 p	155.4	156.8
—dermatologicals	151.3	153.9	154.6	154.6	156.1
—general anti-infectives					
Antibiotics	126.5	128.5	128.6	128.6	129.6
Penicillins	149.3	154.9	154.9	154.9	154.9
273 **Toilet preparations**	144.0	157.7 p	158.9 p	159.2	161.1
—specifically for men	144.1	157.5	157.7 p	157.8	159.0
After-shave, cologne and pre-shave lotions in alcoholic lotion form	159.0	176.4	176.4 p	176.4	176.4
—other than specifically for men	144.0	157.8 p	159.1 p	159.3	161.3
Hair preparations (excl. shampoos)					
Talc and dusting powders and bath preparations	146.8	170.8	170.8	170.8	174.9
Talc and dusting powders	148.4	162.4	164.1 p	164.3	164.3
Bath oils, cream and liquid essences	134.1	153.8	153.8	153.8	153.8
Make-up preparations	144.4	153.6 p	156.2 p	157.1	158.4
Lipsticks and lip glosses inc. lipsalve	143.6	151.6	152.8 p	154.3	154.3
Face powders	143.7	162.3	164.4 p	165.9	168.5
Liquid and cream facial make-up preparations	147.4	160.4	163.4 p	166.2	166.2
Eye shadow and mascara	150.5	160.8	162.1 p	162.1	165.2
Nail preparations	131.1	133.1	140.4	140.3	140.3
Creams and lotions	131.7	141.4 p	146.7 p	147.6	147.6
Facial beauty care preparations	128.3	140.8 p	143.1 p	143.4	143.4
Cleansing creams, cold creams, lotions and milks, moisturisers, nourishing and night creams	129.1	138.1 p	141.1 p	141.4	141.4
General creams and lotions					
Hand creams, lotions and gels	156.5	167.9	167.9 p	171.0	171.4
Deodorants, anti-perspirants and depilatories	133.6	141.3	141.9	141.9	144.6
Dental toothpaste and powder	145.3	154.7 p	154.7 p	154.7	158.4
Soapless shampoos	156.4	175.1	175.1	175.1	179.4
274 **Paint**	140.6	145.2	148.7	150.7	156.6
Air drying and stoving finishers, undercoats, primers, surfacers and sealers, varnishes and lacquers					
Building structural and preservative products	140.6	145.2	148.5	149.6	155.6
Emulsion paints	138.4	142.0	145.7	146.8	152.7
Filling and sealing compounds of all types	134.1	134.7	147.3	147.5	147.6
275 **Soap and detergents**	134.2	141.8	142.1 p	142.9	146.3
Fatty acids	134.2	145.8	143.3	149.8	153.3
Soap (excluding scouring preparations)	130.8	137.3	137.3 p	137.3	140.0
Toilet soap in tablet form	128.3	134.4	134.4 p	134.4	136.5
Finished synthetic detergents compounded materials primarily for washing purposes	133.0	141.2	142.1	142.2	146.3
276 **Synthetic resins and plastics materials and synthetic rubber**	141.4	144.2 p	147.0 p	153.1	159.0 e
276/1 **Synthetic resins and plastics materials**	141.2	143.8 p	146.4 p	152.8	159.4 e
Products of condensation, polycondensation and polyaddition	141.8	144.8 p	149.4 p	153.3	159.3
Products of polymerisation and copolymerisation	138.8	140.0 p	141.7 p	148.7	154.5 e
Acrylics	128.9	131.4	131.4	134.7	141.2
Polyethylene granules, compounds and powders	134.9	135.0 p	138.4 p	147.3	150.9 e
Styrene polymers and copolymers	135.7	137.1	140.4	148.9	157.6
Cellulosics and other plastics and modified natural resins	132.7	143.6	145.2	145.2	148.1
Intermediate forms between the resin and semi-fabricated stages	147.4	148.3	148.4	159.7	180.1
Semi-finished products	145.3	148.6	153.4	159.7	163.7 e
Polyvinyl chlorides	156.0	157.6	158.6	168.1	173.4
277 **Dyestuffs and pigments**	149.1	165.1 p	165.4 p	166.4	169.9
Pigments	149.5	165.7 p	166.1 p	167.4	171.7
Inorganic pigment colours	155.9	166.2 p	167.7 p	175.9	181.3 e
White lead [1]	153.1	207.7	225.0	236.1	232.3
278 **Fertilisers**	139.6	145.2	145.6	145.6	145.6
279 **Other chemical industries**	142.9	152.2 p	155.4 p	156.2	158.7
Explosives, fireworks, etc	152.5	164.1 p	165.1 p	165.9	169.2
279/4 **Formulated pesticides**	143.4	151.1 p	153.2 p	153.6	157.2
Disinfectants	137.5	148.0	148.5	148.8	150.0
Pesticides	156.1	159.8	164.6	165.2	169.4
Insecticides (other than seed dressings)	158.4	161.6	167.0	166.9	171.0
Containing organophosphorous compounds	130.8	126.9	126.9	126.9	130.0
Preparations for plant control					
Herbicides	139.1	144.5 p	146.5 p	146.6	151.0
279/6 **Surgical bandages, etc**	140.4	154.2	154.4	154.6	156.5
Surgical and medicated dressings	144.7	159.0	159.3	159.3	159.7
Disposable sanitary goods					
Sanitary towels and tampons	136.6	150.0	150.0	150.4	153.5
279/7 **Photographic chemical materials**	144.3	148.6	151.5	151.8	155.3
VI Metal manufacture					
311/2 **Steel**	152.2	158.5	159.1 p	159.9	162.6
Non-alloy steels	151.7	157.8	158.2 p	158.8	161.1
Ingots, blooms, billets, slabs	160.7	165.0	165.0	165.0	176.3
Heavy rails, sleepers and fishplates, etc	148.6	160.1	160.1	160.1	160.1
Heavy rolled products, 80 mm and over	161.0	162.1	163.4	163.4	163.8
Angles, tees and other sections	156.6	158.0	160.2	160.2	160.5
Girders, beams, joists, columns	163.0	163.7	164.6	164.6	165.1
Rods and bars in coils	143.8	151.4	151.4 p	151.4	159.9
Steel strip (non-alloy)	145.9	158.1	158.1 p	158.1	158.3
Hot rolled strip (under 600 mm wide)	145.0	156.3	156.3	156.3	156.6
Plates in coils and cut lengths	132.1	134.4	134.4	134.4	134.5
Steel sheet (under 3 mm thick)	154.5	162.1	162.1	162.1	162.5
Uncoated steel sheet	158.7	167.6	167.6	167.6	168.1
Uncoated steel sheet hot rolled	140.4	152.0	152.0	152.0	152.4
Uncoated steel sheet cold reduced	160.6	169.2	169.2	169.2	169.6
Electrical steel sheet	158.7	167.7	167.7	167.7	168.0
Galvanised steel sheet	143.5	147.7	147.7	147.7	148.0
Light sections	143.1	145.8	147.0 p	147.0	147.1
Tinplate and blackplate	165.3	171.5	172.3	172.7	172.7
Tinplate	165.4	171.6	172.4	172.8	172.8
Blackplate	155.2	162.4	162.4	162.4	162.4
Bright steel bars, non-alloy	157.6	168.3	168.6	168.6	176.8
Forgings (other than drop forgings)	164.8	177.1	177.5	177.9	181.3
Non-alloy steel castings	159.5	170.1	170.8	176.1	182.7
Stainless and heat resisting alloy steels	146.5	153.4	154.5	154.6	157.9
Sheets (under 3 mm thick)	154.7	166.9	166.9	166.9	167.0
Stainless steel sheets	147.4	162.3	166.4	166.9	174.5
Stainless steel castings	158.8	166.7	169.2	171.0	176.8
Alloy steels other than stainless and heat resisting	168.7	173.1	176.8	178.8	185.1
Ingots, blooms, billets, slabs (excluding tube)	155.3	160.5	162.4	162.9	169.9
Bars and rods other than in coil (excluding bright bars)	124.6	138.4	138.4	138.4	138.6
Plates in coils and cut lengths	152.8	164.4	169.3	170.7	176.2
Alloy steel castings					

Table 3 Commodities produced in the United Kingdom *continued*

1975 = 100

1968 SIC order or MLH and industry	1978 Apr	1979 Jan	Feb	Mar p	Apr p
	Structural steel	146.4	150.2	150.6	150.6	151.5
	Steel for reinforcement (cut, bent and delivered)	151.8	158.9	158.9	162.0	163.4
	Light re-rolled bars and sections	145.2	148.5	148.9 p	152.4	156.7
	All types of steel forgings (other than drop forgings)	163.5	176.1	176.1	178.3	183.2
312	**Steel tubes**	155.5	165.0 p	165.1 p	165.1 p	167.9
	Fittings for steel tubes	145.3	153.7 p	155.0 p	155.0	155.4
	Steel tubes (other than electric conduit tubes)	159.4	171.9	171.9	171.9	171.9
313	**Iron castings and pig iron**	149.2	162.4 p	166.7 p	169.8	171.9
313/3 313/4	**Iron castings**	150.1	163.9 p	166.7 p	170.2	172.3
313/3	**Engineering castings**	147.9	159.4 p	162.8 p	165.3	166.8
	Vehicle iron castings	144.4	159.1	162.7	164.0	166.9
	Industrial and marine iron castings	150.7	159.7 p	162.8 p	166.3	166.8
	Heavy engineering	148.4	158.6 p	165.9 p	167.5	167.5
	Light engineering and hydraulic	148.1	158.7 p	160.9 p	163.8	163.8
313/4	**Other iron castings**					
	Building and domestic goods	151.6	176.0	178.8	186.1	190.8
	Cast and spun iron pipes and fittings	150.7	164.5	164.5	166.5	167.4
321	**Aluminium and aluminium alloys**					
	Semi-manufactures (excluding castings and forgings)					
	Aluminium plate, sheet, strip, circles and blanks	177.1	180.3	185.7	184.0	184.0
	Aluminium extrusions and tubes (bars, rods, sections, etc)	176.9	185.6	184.8	183.4	183.4
	Aluminium forgings	171.5	191.5	191.5	191.5	191.5
322	**Copper, brass and other copper alloys**					
	Copper					
	Copper tubes	138.3	161.2	176.2	190.7	190.7
	Copper sheet and strip	135.9	157.1	172.5	180.9	181.4
	Brass and other copper alloys					
	—unwrought	123.8	138.5	157.7	162.2	166.0
	—semi-manufactures	123.6	142.7	156.0	162.1	162.0
323	**Miscellaneous non-ferrous metals**					
	Lead and lead alloys					
	—semi-manufactures	159.6	231.9	250.9	266.6	271.2
	Nickel [2]	128.2	99.4	107.4	125.7	144.6
	Titanium	155.8	212.0	212.0	212.0	212.0
VII	**Mechanical engineering**					
331	**Agricultural machinery**	160.5	175.8 p	175.9 p	177.5	178.6
	Soil preparation and cultivation machinery	159.9	170.6	171.0	173.7	174.1
	Harvesting, threshing, feed processing etc, machinery	161.8	180.6 p	180.7 p	180.7	181.4
	Pick-up balers	164.9	179.8	179.8	179.8	179.8
	Grinding mills and meal mixers (excluding combined mills and mixers)	153.7	173.7	174.7	175.6	176.1
	Milking machinery					
	Milking machines, including parts	169.9	173.0	173.0	184.3	187.6
	Elevators and conveyors (excluding tractor mounted hydraulic loaders)	165.9	185.9	185.9	185.9	187.8
332	**Metal working machine tools**	153.9	168.9 p	169.6 p	170.4	172.9
332/1	**Metal cutting machine tools**	155.9	170.4	170.6	171.2	174.2
332/2	**Metal forming machine tools**	151.7	167.0 p	169.2 p	170.4	171.6
333	**Pumps, valves, compressors and fluid power equipment**	145.8	157.7 p	159.0 p	159.3	161.3
333/1	**Pumps**	150.4	159.1 p	160.7 p	160.8	163.2
	Centrifugal pumps	150.3	158.3 p	159.6 p	159.8	162.5
	Positive displacement pumps	152.3	163.5	164.4	164.4	166.0
	Kerbside petrol and oil measuring pumps and parts	144.0	152.1	160.2	161.1	161.1
333/2	**Industrial valves**	137.1	149.4	151.0	151.8	154.7
	Valves – ferrous metal	133.6	145.4	146.0	146.1	148.8
	Iron valves	148.7	161.1	162.9	163.0	166.5
	Steel valves	128.6	140.2	140.4	140.5	143.0
	Valves – non-ferrous metal	147.1	160.7	165.1	168.0	171.6
333/3	**Air and gas compressors**	155.7	167.2 p	167.9 p	168.8	168.8
333/4	**Fluid power equipment**	147.7	161.8	163.0	163.1	164.3
	Oil/hydraulic fluid power equipment	148.8	166.3	166.4 p	166.6	168.5
	Pneumatic control fluid power equipment	145.7	153.5	157.0	157.0	157.0
334	**Industrial engines**	166.5	180.1	182.4	183.3	185.7
	Diesel compression internal combustion engines	166.5	180.7	183.2	184.1	186.7
336	**Construction and earth-moving equipment**	164.5	178.1 p	178.7 p	179.5	182.9
	Excavators, trenchers, ditchers and digging machinery including parts	170.7	186.7	187.1	189.7	194.5 e
	Wheeled tractor shovels, crawler tractors, dumpers and other earth-moving equipment	164.1	178.1	178.8	178.8	180.4
	Dumpers and dump trucks	152.5	163.4	164.1	164.1	167.5
	Concrete mixing and placing machinery	154.2	166.1	168.0	169.4	170.7
	Crushing, pulverising and screening plant, including parts	154.1	169.2	169.2	169.2	169.2
337	**Mechanical handling equipment**	150.8	161.0 p	164.1 p	164.3	166.9
337/2	**Cranes and transporters**	150.5	165.0	166.1	166.1	168.5
337/4	**Lifting and winding devices**	148.1	162.9	163.3	163.3	166.5
337/5	**Powered industrial trucks and tractors**	160.3	169.1 p	174.4 p	174.6	175.8
339/1	**Mining machinery**	145.2	156.1 p	157.0 p	157.4	161.9
339/3	**Refrigerating machinery**	160.9	174.2 p	174.8 p	175.9	179.6
339/5	**Scales and weighing machinery (excluding precision balances)**	145.2	168.0	169.1	169.1	169.2
339/6	**Portable power tools**	147.1	158.2	158.9 p	160.0	161.3 e
	Portable power tools, non-electric – pneumatic					
	—for civil engineering, mining and quarrying	156.5	168.4	172.1	172.8	172.8
	—for general engineering	150.6	167.8	167.9 p	172.7	172.7
	Portable power tools, electric	144.0	152.2	152.2	152.3	154.3 e
	—power drills	150.9	157.1	157.1	157.1	159.3 e
339/7	**Food and drink processing machinery**	149.3	167.8 p	169.0 p	169.2	170.8
339/9	**Miscellaneous (non-electrical) machinery**	155.3	168.4 p	170.5 p	171.2	173.3
VIII	**Instrument engineering**					
352	**Clocks, watches and time recorders**	151.8	163.6	165.4 p	165.5	167.0 e
	Clocks	156.1	168.0	170.9 p	170.9	172.5 e
354	**Scientific and industrial instruments and systems**	144.5	154.7 p	156.3 p	156.4	157.8
354/2	**Other scientific and industrial instruments and systems (non-optical)**	143.7	153.4 p	153.9 p	154.2	156.8
	Analytical instruments					
	Spectrophotometers and absorptiometers	133.9	137.0 p	138.2 p	138.4	140.3
	Electrical measuring, testing and controlling instruments and apparatus	142.1	149.6 p	150.4 p	150.5	154.0
IX	**Electrical engineering**					
365	**Broadcast receiving and sound reproducing equipment**	128.1	134.0 p	134.2 p	134.3	135.5
365/1	**Gramophone records and pre-recorded tapes**	142.2	161.1 p	161.5 p	161.5	161.6
	Gramophone records	143.7	163.3 p	163.8 p	163.8	164.0
	—33⅓ rpm	144.5	164.7 p	164.7 p	164.7	164.7
	—45 rpm	138.6	156.8 p	159.6 p	159.6	160.7
	Pre-recorded tapes (other than video)	134.8	150.3	150.3	150.3	150.3
365/2	**Broadcast receiving and sound reproducing equipment, other than gramophone records and pre-recorded tapes**	123.7	125.7 p	125.8 p	125.9	127.4 e
	Domestic television receivers	126.1	128.7 p	128.7 p	128.7	130.2
	—monochrome	126.9	128.6	128.6	128.6	135.0
	—colour	126.0	128.7 p	128.7 p	128.7	129.8
	Stereo audio systems, incorporating turntable/amplifier	112.6	112.3 p	112.6 p	113.0	114.4 e
368	**Electrical appliances primarily for domestic use**	151.7	161.4	161.9	163.1	165.9
	Domestic electric cooking apparatus	155.4	165.1	166.1	168.0	172.1
	Domestic electric flat irons	145.9	155.3	155.3	165.5	165.5
	Domestic electric heating apparatus	157.2	169.2	169.9 p	169.9	176.0
	Domestic space heating apparatus	164.1	173.6	174.9 p	174.9	182.8
	Electric water heaters	151.6	172.4	172.4	172.4	172.4
	Vacuum cleaners	153.3	163.1	163.7	166.3	166.3
	Domestic refrigerators and freezers	141.9	148.4	148.4	148.4	148.4
	Miscellaneous domestic electric appliances (includes food and drink mixers, hair dryers and dry shavers)	152.2	161.3	161.3 p	161.3	165.1 e
369/4	**Electric lamp bulbs and tubes**	155.4	165.1	165.1	165.1	165.1
	Fluorescent tubular lamps	155.6	167.3	167.3	167.3	167.3
	Electric lamp bulbs, filament type —exceeding 28 volts	157.4	165.6	165.6	165.6	165.6
XI	**Vehicles**					
380	**Wheeled tractors, complete**	175.3	194.2	194.3	194.3	194.3
381	**Motor vehicles**	158.9	174.0	174.6	175.1	176.1
	Passenger cars	162.4	177.3	178.2	178.2	178.3
	Passenger cars [3]	162.4	177.3	178.2	178.2	178.3
	Commercial and public service vehicles	159.6	178.2	178.3	178.3	179.5
	Commercial vehicles	160.4	178.4	178.5	178.5	178.6
	Commercial vehicles and chassis not exceeding 3.5 tons gvw	167.4	186.3	186.5	186.5	186.5
	Commercial vehicles and chassis exceeding 3.5 tons but not exceeding 16 tons gvw	158.1	176.2	176.3	176.3	176.3
	Commercial vehicles and chassis exceeding 16 tons gvw	154.7	171.2	171.3	171.3	171.7
	Public service vehicles	157.9	177.8	177.9	178.0	181.3
XII	**Metal goods not elsewhere specified**					
390	**Engineers small tools and gauges**	165.3	182.1	185.6 p	187.6	191.7
	Engineers cutting tools	165.3	183.4	185.1 p	187.0	190.8
	Diamond tipped tools and diamond dies	157.1	211.8	224.9	224.9	238.9
	Saws					
	Hacksaw blades	186.0	203.0	214.0 p	217.2	221.3
	Milling cutters	149.3	163.4	163.4	165.7	165.7
	Engineers gauges and measuring instruments	162.9	183.8	190.9	191.5	192.4
391	**Hand tools and implements**	160.2	175.0	177.0	177.3	178.3
	Agricultural, horticultural and foresters hand tools	173.1	187.4	187.4	187.4	191.1
	Hand saws and hand saw blades	178.0	204.9	205.9	206.1	206.1
	Hand tools and implements excluding agricultural and foresters hand tools and saws and saw blades	156.8	172.1	175.1	175.5	175.6
	Pliers, pincers and nippers, etc	182.1	196.9	203.3	204.4	206.2
	Spanners and wrenches	160.3	175.7	181.6	182.5	182.5
	Planes, hammers, cold chisels etc, screwdrivers, wood chisels and gouges	155.7	176.1	176.1	176.1	176.1
	Measuring and marking out tools	146.1	155.4	155.6	155.7	155.7
392	**Cutlery, spoons, forks and plated tableware etc**	151.4	164.7	166.4	171.4	172.6
	Finished cutlery suitable for domestic or personal use	151.8	167.5	169.7	171.1	171.1
	Scissors and tailors' shears (including pinking shears)	158.2	168.0	171.8	171.8	171.8
393	**Bolts, nuts, screws, rivets etc**	166.0	172.6	172.8	173.4	178.1
	Precision standard bolts etc, of high tensile steel	150.1	152.7	152.7	152.7	154.3

Table 3 Commodities produced in the United Kingdom *continued*

1975 = 100

1968 SIC order or MLH and industry	1978 Apr	1979 Jan	Feb	Mar p	Apr p
394 **Wire and wire manufactures**	147.6	158.8	161.2	168.5	174.0
Iron and steel wire	149.9	159.3	159.3	166.6	173.1
Single drawn wire other than alloy and high carbon steel	148.7	160.9	160.9	160.9	172.3
Wire ropes (excluding insulated electric wire and cable)	144.5	155.9	158.0	158.0	159.2
Iron and steel woven wire, cloth gauze fabric etc, (excluding netting and fencing) of square or rectangular mesh	159.1	159.4	160.7	174.5	174.6
—stainless steel	149.7	150.3	152.0	164.2	164.2
—other than stainless steel	163.9	164.1	165.2	179.7	179.9
Other wire manufactures, ie grille netting, fencing reinforcement fabric etc	150.7	157.3	155.2	162.3	166.5
Wire of copper, brass and other copper alloys					
Woven wire cloth, gauze fabric, etc, of copper and brass, etc	150.4	151.8	152.5	174.4	174.4
Reinforcement fabrics	150.3	150.3	150.3	162.2	163.8
Chain link fencing	155.4	170.0	170.0	170.0	174.6
399 **Metal industries not elsewhere specified**	153.2	165.7	167.6	168.7	170.8
399/1 **Metal furniture**	146.6	158.2	158.3	163.0	164.0
Office metal furniture	149.9	167.8	168.0	168.1	181.1
Filing cabinets and other filing containers	155.9	172.2	172.2	172.2	188.7
399/2 **Metal windows and door frames**	164.6	177.4	179.4	181.2	187.1
399/6 **Domestic hollow ware**	154.0	167.4	174.3	174.3	174.4
Cookware	157.5	171.3	181.6	181.6	181.6
399/7 **Vats, tanks, cisterns and other industrial hollow ware**	154.2	162.6	162.6	162.6	168.5
Steel drums	157.1	165.8	165.8	165.8	171.3
399/8 **Needles, pins, fishhooks and other metal smallwares**	170.7	181.9	184.4	187.8	189.1
399/9 **Domestic gas appliances**	160.6	171.3	171.5	172.0	172.1
Gas cookers	159.9	170.8	170.8	170.8	170.8
Gas fires and space heaters	163.6	171.8	172.6	174.3	174.9
Water heaters and other domestic gas apparatus (excl. refrigerators and meters)	158.2	172.5	172.6	172.7	172.7
399/12 **Miscellaneous metal goods**					
Sanitary ware and plumbing fixtures and fittings	154.2	169.9	175.9	180.1	181.5
Fire extinguishers (hand operated chemical type only)	140.4	151.5	152.4	152.4	152.4
Catering equipment	153.2	166.2	168.1	169.2	171.2
Plumbers brassware	151.9	168.0	178.7	183.5	184.7

XIII Textiles

411 **Man-made fibres production**	126.5	130.4	132.3	132.9	135.7 e
Man-made fibres – continuous filament yarn	135.4	141.2	144.5	145.7	149.4 e
412 **Spinning and doubling on the cotton and flax systems**					
Single yarns spun on the cotton and flax systems	140.4	153.5	153.9	154.2	156.5
Single yarns of man-made staple fibres spun on the cotton and flax systems	137.7	145.1	145.1	145.8	148.7 e
Man-made continuous filament yarns, textured, bulked or crimped – synthetic fibres	120.6	131.5	135.2	137.2	140.2
Finished thread for sewing, embroidery, etc	166.8	181.1	181.1	181.1	181.1
—of man-made fibres	140.0	151.2	151.2	151.2	151.2
413 **Weaving of cotton, linen and man-made fibres**	135.8	144.3	144.6	145.3	148.2
Woven cotton cloth in the loomstate	141.2	149.1	149.5	150.6	157.3
Cloth wholly of man-made continuous filament yarn on the loomstate	131.9	139.0	139.0	140.8	142.7 e
Man-made fibre tyre cord and tyre fabric	134.9	140.4	140.4	140.4	142.3
Woven linen	166.0	172.8	177.0	177.0	178.5
Woven fabric of glass fibre	162.7	173.3	173.3	173.3	173.5
414 **Woollen and worsted products**	153.0	159.7	161.5	164.9	167.7
414/1 **Wool sorting, cleaning, etc and combing and top making**					
Wool tops	158.9	159.6	163.5	175.8	175.3 e
414/2 **Yarns spun on the worsted and semi-worsted systems**	146.4	155.0	156.9	159.9	160.7
Yarns of wool spun on the worsted system	153.0	159.3	160.4	162.7	163.8
Yarns of man-made fibres spun on the worsted system	134.3	140.6	142.0	143.4	143.8
414/3 **Woven worsted fabrics**	147.2	150.4	150.5	152.5	156.1
414/4 **Wool rag** [2]	158.6	166.2	164.5	166.9	169.5 e
414/5 **Woollen spinning and weaving**					
Woven woollen fabrics (other than blankets)	159.7	166.9	167.9	170.1	176.0
Woven woollen fabrics (other than blankets) containing 50 per cent or more by weight of wool or fine animal hair	163.1	169.5	170.7	171.2	175.5
Spinning and weaving of jute and other yarns on the jute system	139.3	142.8	143.0	144.9	151.2
Spun yarns of jute and man-made fibres	143.9	151.5	152.2	158.3	163.7
Woven cloths of jute and man-made fibres	131.9	139.4	139.4	139.4	144.7
Woven cloths of polypropylene on the jute system	139.4	139.0	139.0	139.0	146.1
Rope, twine and net	124.3	128.7	128.8	129.2	136.5
Cordage, cables, ropes and twine of textile materials (excl. agricultural twines)	123.4	130.0	130.3	131.0	137.9
417 **Hosiery and other knitted goods**	130.9	144.5	145.7	146.3	148.9
Socks and stockings	122.6	136.8	137.8	138.6	142.4
Women's socks and stockings	146.8	156.5	160.1	160.3	161.2
419 **Carpets and rugs**	160.1	171.5	176.5	176.8	177.9
Woven carpets and carpet type rugs —faced with yarn containing at least 50 per cent but less than 100 per cent by weight of wool	162.1	175.3	179.4	179.8	181.8
Rugs including pile fabric, deep pile knitted	149.7	159.4	165.4	167.6	167.7
421 **Narrow fabrics**					
Petershams, galloons and ribbons	154.0	162.5	170.6	170.9	170.9
422 **Made-up textiles**					
422/1 **Household textiles and handkerchiefs**	138.4	148.8	149.3	149.9	150.7
Hand and bath towels	149.4	157.7	157.7	157.7	157.7
429 **Other textile industries**	161.0	175.1	176.2	176.2	178.7
429/1 **Asbestos manufactures**	167.3	184.0	184.0	184.0	184.0
429/2 **Miscellaneous textile industries**					
Mechanically bonded fibre-needled fabrics	155.2	168.9	169.9	170.0	180.9

XIV Leather goods and fur

431/1 **Leather**					
Finished leather – for footwear	133.2	166.0	166.0	179.7	182.5 e
432 **Leather goods**	145.5	163.6 p	164.4 p	164.4	165.9

XV Clothing and footwear

441 **Weatherproof outerwear**	135.3	146.1 p	146.6 p	146.6	148.4
Raincoats (excl. those of infants)	132.1	141.8 p	142.1 p	142.1	142.1
Raincoats other than of plastics material					
Weather protective industrial clothing of PVC coated materials	148.3	163.0	168.3	168.3	175.2
442 **Men's and boys' tailored outerwear**	134.2	145.7	147.0	147.9	149.0
Men's and boys' suits	140.4	153.7	155.4	157.1	157.1
Men's trousers (sold separately)	126.0	134.7	135.5	135.3	139.6
444 **Overalls and men's shirts, underwear, etc**	147.3	155.5	156.1	156.3	156.9
444/2 **Men's and boys' shirts, underwear and nightwear**	137.4	146.1	146.5	146.8	147.8
449 **Corsets, gloves and miscellaneous dress industries**	144.1	159.4	160.8	161.1	161.8
449/1 Corsets	134.2	145.9	149.2	149.2	149.2
Brassieres	153.1	175.6	175.7	175.7	175.7
449/3 **Umbrellas and walking sticks**	135.3	144.9	144.9	145.7	145.7
450 **Footwear**	144.4	157.8	158.3	159.0	161.4
Outdoor footwear	144.7	158.5	159.0	159.7	162.4
Boots and shoes with uppers wholly or mainly of leather	152.3	168.1	168.9	169.8	172.9
Men's boots and shoes with uppers wholly or mainly of leather	154.9	166.6	168.3	169.1	175.3
Women's boots and shoes – with uppers wholly or mainly of leather	153.6	173.6	173.6	175.2	176.3
Slippers, houseshoes and ballet shoes					
Women's slippers, houseshoes and ballet shoes	147.5	161.2	161.2	162.6	162.6

XVI Bricks, pottery, glass, cement, etc

461 **Bricks, fireclay and refractory goods**	160.2	171.8 p	172.9 p	173.3	174.5
461/1 **Refractory goods**	166.7	174.2 p	174.5 p	175.0	176.5 e
Refractory bricks and shapes	168.7	174.4 p	175.0 p	176.0	177.6
Firebricks and shapes	154.0	161.2 p	161.2 p	161.2	163.0
461/2 **Clay building bricks and other non-refractory goods**	154.3	168.8	170.4	170.9	171.9
Common, facing and engineering bricks	153.4	168.6	169.7	170.2	171.4
Common bricks	150.6	168.4	168.8	169.5	172.0
—Non-fletton (ex-works)	157.4	174.5	175.3	176.6	181.1
—Fletton (delivered)	142.2	160.7	160.7	160.7	160.7
Facing bricks	156.3	169.5	171.2	171.5	171.8
—Non-fletton (ex-works)	164.0	176.0	178.7	179.1	179.5
—Fletton (delivered)	142.0	157.4	157.4	157.4	157.4
Engineering bricks (ex-works)	150.5	165.3	165.6	166.2	167.0
Engineering bricks (delivered)	158.3	169.3	170.0	171.7	171.7
Clay roofing tiles (ex-works)	151.2	173.7	173.7	173.7	173.7
Unglazed floor quarry tiles (ex-works)	158.5	176.3	176.3	176.3	176.3
462 **Pottery**	147.1	160.9	165.0 p	165.2	165.6
462/1 **Electric ware incl. insulators and insulator fittings wholly or mainly of ceramic material**	149.2	158.0	164.0	165.4	168.9
462/2 **Vitreous china sanitary ware and pottery tiles**	148.1	162.5	162.5	162.5	162.5
Tiles, excl. pre-cast concrete tiles	131.0	145.2	145.2	145.2	145.2
Vitreous china sanitary ware	170.3	185.0	185.0	185.0	185.0
463 **Glass**	157.6	166.9	167.3	167.5	168.0
463/1 **Glass other than containers and vacuum ware**	155.7	166.1	166.6	166.7	167.7
Flat glass	157.6	167.4	167.4	167.4	167.6
Domestic and ornamental glassware	154.9	171.9	173.1	173.1	173.7
—Hand gathered	154.3	165.4	167.8	167.8	167.8
—Mechanically gathered	155.1	174.4	175.2	175.2	176.0
Laboratory hygienic and pharmaceutical glassware and balls, tubing and rods	148.0	163.1	164.1	164.5	167.1
Glazing sheet and plate glass	159.5	169.0	169.0	169.0	169.0
463/2 **Glass containers and vacuum ware**					
Glass containers	159.9	167.8	168.0	168.4	168.4
—non-tubular for all products excl. wines, spirits, beer and cider	161.0	170.3	170.6	171.3	171.3
464 **Cement**					

Table 3 Commodities produced in the United Kingdom *continued*

1975 = 100

1968 SIC order or MLH and industry		1978 Apr	1979 Jan	Feb	Mar p	Apr p
	Calcareous cement (other than clinker) delivered in bulk	161.4	173.7	183.0	185.3	187.8
	Cement in bags	162.0	175.2	186.1	189.7	192.0 e
469/1	**Abrasives**	163.0	172.6	173.3	175.7	177.5
	Abrasive wheels (disc wheels, segment sharpening stones and other forms of bonded abrasives incl diamond)	164.2	175.9	176.9	176.9	177.5
	Coated abrasives – abrasive paper and cloth	160.8	166.5	166.5	173.4	177.5 e
469/2	**Miscellaneous building materials and mineral products**	167.1	179.7p	181.0p	184.0	185.8
	Plasterboards	138.2	148.1	148.1	148.1	149.8 e
	Precast concrete goods	159.9	170.0p	172.2p	173.7	174.7
	Concrete blocks, bricks, kerbs and edgings					
	Flagstones	154.5	169.4	178.4	180.2	180.2
	Kerbs and edgings	144.5	158.9	168.7	169.6	169.7
	Precast concrete building blocks – delivered	160.6	174.7	179.3	184.7	184.7
	Precast concrete pipes to BS556 – delivered	173.6	176.5p	176.5p	176.5	176.5
	Roofing tiles and fittings and concrete/terrazzo floor and wall tiles	152.2	157.0	157.4	162.5	166.9
	Asbestos cement goods	191.1	212.1	212.1	228.6	230.6
	Bituminous and flax felts	153.5	157.4	157.4	168.6	170.5
	Insulating materials for thermal and acoustic purposes n.e.s.	158.0	163.5	169.9	174.0	174.7
	Quicklime	183.9	200.1	200.4	200.4	201.8
	Limestone dressed, polished, etc	173.1	196.7p	197.9p	198.1	200.4 e
	Plaster (gypsum)	138.5	147.7	147.7	147.7	149.4
XVII	**Timber, furniture, etc**					
471/1	**Timber, sawmilling etc**					
	Homegrown sawn hardwood	159.9	181.7	183.6	187.7	187.8
	Hardwood flooring blocks and mosaic flooring	141.1	146.2	146.7	147.1	147.2
471/2	**Builders' woodwork**	152.0	160.1	160.6	161.6	165.2
	Door sets, leaves and frames and window frames	156.1	160.5	160.5	162.1	170.0
	Door leaves	156.2	161.0	161.0	164.0	170.8
	Window frames	156.0	159.9	159.9	159.9	169.3
	Timber structures and structural components	148.0	159.6	160.9	161.1	161.3
472	**Furniture and upholstery**	142.7	153.3	156.9	158.4	159.1
	Domestic upholstered furniture	137.6	148.7	152.2	153.6	153.6
	Domestic wooden furniture	146.6	157.5	161.2	163.2	164.5
	Bedroom furniture, excl. built-in	140.8	153.5	154.6	156.3	157.1
	Kitchen furniture (excl. built-in)	146.7	166.6	169.9	172.1	172.9
	other than tables and seating	145.7	166.0	167.7	170.4	171.2
	Dining/living room furniture, excluding built-in	149.5	159.8	164.1	164.7	165.6
	Seating	146.1	155.6	161.1	162.0	162.0
	Occasional furniture for dining/living room	142.5	155.2	158.4	160.2	160.2
473	**Bedding and soft furnishings**					
	Fully finished mattresses	154.2	166.2	173.3	175.6	176.5
	Bolsters and pillows (covered)	190.3	196.6	201.8	203.2	203.2
XVIII	**Paper, printing and publishing**					
481	**Paper and board**	130.9	136.6	138.0	140.6	143.8
	Printing and writing paper and all boards for printing (excl. newsprint)	131.3	137.0	137.6	143.0	145.9
	Wrapping paper	120.5	127.2	127.6	127.6	136.9
	All tissue stocks	128.2	130.8	130.8	130.8	133.6
	Industrial and special purpose paper	127.5	135.1	135.8	136.8	138.6
	Packaging boards	138.1	142.7	148.0	149.5	152.8
	Industrial and special purpose boards	137.7	140.1	140.8	141.2	147.5
482	**Packaging products of paper, board and associated materials**	132.3	142.3	142.6	143.0	147.7
482/1	**Cardboard boxes, cartons and fibreboard packing cases**	136.1	144.7	145.0	145.6	150.5
	Cartons	147.5	156.1	157.0	158.5	159.9
	Fibre-board packing cases	126.1	134.4	134.4	134.4	142.0
	—Solid	132.7	143.2	143.2	143.2	143.2
	—Corrugated	125.6	133.7	133.7	133.7	141.9
482/2	**Miscellaneous packaging products of paper and film**	123.7	136.8	136.9	137.2	141.6
	Paper bags	100.8	112.3	112.5	112.7	122.3
	Paper sacks	125.6	140.1	140.1	140.2	143.4
483	**Manufactured stationery**	144.0	153.9	154.7	155.3	159.0
	Commercial envelopes	132.8	145.4	145.4	145.4	145.4
	Business forms	140.5	147.8	149.3	150.3	157.2
	Continuous stationery	130.0	137.9	139.1	140.9	148.3
	Stationery and scholastic books and ruled paper	153.2	168.1	168.1	168.1	175.7
	Loose leaf supplies	142.5	154.8	156.1	156.7	156.1
	Filing supplies	136.7	150.0	150.0	150.0	150.0
484	**Manufactures of paper and board not elsewhere specified**	136.3	141.2	141.5	145.5	147.7
484/2	**Miscellaneous manufactures of paper and board**					
	Toilet paper	142.0	142.0	142.0	149.8	154.2
	Household and sanitary tissue products	137.9	139.7	140.7	148.4	150.3
	Handkerchiefs and facial tissues	139.5	139.5	139.5	150.3	152.7
	Kitchen rolls and towels	136.0	136.0	139.4	148.5	151.2
XIX	**Other manufacturing industries**					
491	**Rubber manufactures**	149.9	160.0	162.7p	165.7	169.2
491/1	**Tyres and tubes**	145.9	152.6	157.7p	161.2	164.1
	New tyre covers	146.2	151.9	157.5p	161.3	164.5
	—cross-ply, car and van	148.4	149.5	158.0p	163.9	165.3
	—radial ply, car and van	146.9	151.8	157.3p	160.4	162.0
	—commercial vehicles	145.2	152.1	157.5p	161.4	165.8
	tractors, earthmovers and land/road	144.8	153.9	157.0p	160.3	166.0
491/2	**Other rubber goods**					
	Belting (of rubber or plastics)	151.9	168.1	168.9	169.1	169.1
	Conveyor and elevator belting	154.9	173.4	174.1	174.4	174.4
	Belting other than conveyor and elevator belting					
	Transmission belting	143.7	153.7	154.9	154.9	154.9
	Miscellaneous rubber products					
	Cellular products of rubber	134.5	151.0	151.2	156.1	160.6
492	**Linoleum, plastics floor-covering, leathercloth etc**	135.5	140.3	141.4	144.0	144.7
493	**Brushes and brooms**	145.6	160.9	161.6	162.8	164.9
	Decorating brushes and rollers	141.2	157.3	158.4	160.7	161.0
	Toilet brushes	147.6	165.5	167.1	170.0 e	173.2 e
494	**Toys, games, children's carriages and sports equipment**	149.4	159.4	163.6	163.6	165.2
494/1	**Toys and games**	145.4	156.7	162.3	162.3	162.7
	Dolls and soft toys	150.7	167.1	167.1	167.1	167.1
	Mechanically self-propelled and die-cast metal toys	146.0	154.6	167.8	167.8	167.8
	—mechanical (self-propelled) including train sets	140.9	156.7	157.0	157.0	157.0
	—die-cast	146.9	154.3	169.6	169.6	169.6
	Indoor table games	141.7	157.4	157.4	157.4	157.4
494/3	**Sports equipment**	164.3	170.2	171.4	171.4	175.1 e
495	**Miscellaneous stationers' goods**	139.5	145.3	145.3	147.3	147.3
495/1	**Pens and pencils**	148.8	157.5	157.5	158.3	158.3
	Ballpoint pens	152.6	154.7	154.7	156.2	156.2
	Fountain pens, stylos and markers	146.3	155.9	155.9	156.0	156.0
	Fountain pens with stainless steel nibs	146.9	162.3	162.3	163.1	163.1
496	**Plastics products**					
	Building materials of plastics	152.5	162.1	163.6	168.5	179.5
	Pipes and fittings of plastics	158.2	168.6	169.3	176.3	189.2
	Rainwater pipes and fittings of plastics	158.0	167.0	168.3	173.5	180.5 e
	Packaging products and transit containers of plastics	144.0	151.0	152.4	159.0	168.0
	Other plastics products					
	Haberdashery of plastics (including slide and zip fasteners)	145.8	150.5	150.5	156.2	156.8
499/1	**Musical instruments**					
	Pianos	155.5	157.4	163.5	163.5	163.5
	Other indices					
312, 361/2, 362, 369/5	Part Electrical installation materials, domestic	140.3	154.5	157.4p	159.3	161.5 e
338, 399/1, 399/3, 472	Part Office equipment and machinery (excluding computers and calculators)	140.0	154.2 p	154.6 p	154.8	157.8
399/1, 472	Part Office furniture	143.1	157.5	158.4	158.4	163.9
	Special indices					
	Granite and limestone roadstone	157.3	171.7	172.6p	175.3	175.7
	Petroleum products	152.3	152.3	157.9	161.9	166.8
	Steel sheets	155.9	164.3	164.3	164.3	164.6
	Steel sheet piling	162.6	168.8	179.4	179.4	180.1
	Finished stainless steels	142.0	142.1	142.1	142.1	143.9
	Finished steels (other than sheets, tinplate, tubes, forgings and castings)	147.2	152.4	152.8p	153.4	156.2
	Steel castings	155.5	167.1	169.6	172.9	179.4
	Semi-finished steels for forgings (other than drop forgings)	166.6	169.9	171.6	175.4	184.2
	Malleable iron castings	157.8	169.3	170.9	176.6	178.2
	Wrought aluminium	171.0	180.6	182.4	183.0	186.6
	Brass ingots	122.5	133.5	150.1	155.0	157.2
	Industrial pumps	150.7	159.5p	160.7p	160.8	163.3
	Primary and secondary batteries	162.5	173.6	179.1	182.9	186.1
	Door sets, leaves and frames	156.1	161.1	161.1	164.0	170.7
	Domestic furniture	143.7	154.7	158.4	160.1	161.0
	Divan sets	147.2	163.6	167.5	168.3	168.3

[1] Index based on scheduled outer zone prices for minimum bulk loads of 500 gallons (motor spirit 1000 gallons) exclusive of rebate.
[2] Source of price information: trade publications.
[3] Inclusive of VAT and car tax.
[4] These indices are specially constructed outside the normal wholesale price index structure. Their continued publication is a temporary measure to enable extant VOP contracts to be completed.

p Provisional. c Corrected. r Revised. e Estimates which are subject to possible major revision.

Wholesale price indices: further information

Correspondence: Departments of Industry and Trade, Economics and Statistics Division 4, Room 249, Sanctuary Buildings, Great Smith Street, London SW1P 3DB.

01-215 3073 General inquiries and
01-215 3544 tables 1, 1a and 2

01-215 5216 table 3 SIC orders II-VI and XII
01-215 3549 VII-IX and XVI

01-215 3548 XI, XIII-XV and XVII-XIX
01-215 3173 tables 4 and 5

Revision to table 3

1968 SIC		1977 Sep	Oct	Nov	Dec	1978 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
312	**Steel tubes**									157.7	158.2	158.3	164.7	164.9	164.9	164.9	164.9
	Steel tubes (other than electric conduit tubes)									160.9	161.0	161.0	171.5	171.9	171.9	171.9	171.9
483	**Manufactured stationery**																
	Filing supplies	132.8	133.6	133.7	133.7	134.6	134.7	135.4	136.7	136.9	136.9	137.3	137.3	137.8	141.0	141.0	149.3

Table 4 Commodities wholly or mainly imported into the United Kingdom

1975 = 100

	1978 Apr	1979 Jan	Feb	Mar p	Apr p
Hides, skins and fur skins undressed					
Hides and skins, imported	230.0	349.9	391.5	465.1	469.8
Hides	224.9	344.9	383.8	461.5	465.2
Wet	226.4	349.7	388.6	464.7	471.4
Dry	202.4	272.7	311.2	413.6	373.6
Calf skins	297.6	415.4	492.1	512.3	530.1
Hides and skins, UK origin	231.6	355.1	410.9	492.6	447.0
Hides and skins, UK origin and imported	227.5	348.5	397.2	476.7	451.0
Oilseeds, oilnuts and oil kernels	156.9	151.2	155.1	158.5	154.3
Groundnuts, African, cif Europe [1]	172.2	159.6	156.2	148.4	149.5
Copra, Philippine, cif Europe [1]	191.0	289.0	297.8	290.1	299.2
Palm nuts and kernels, Nigerian, cif Europe [1]	203.0	249.7	258.6	261.7	265.9
Soya beans, US No. 2 grade, cif UK [1]	157.0	142.4	147.2	151.6	145.4
Linseed, Canadian No. 1, cif UK [1]	88.5	94.1	91.0	101.9	100.7
Animal oils and fats					
Herring oil [1]	160.7	129.0	132.0	143.9	142.4
Fixed vegetable oils and fats					
Cottonseed oil, washed [1]	114.1	118.0	129.8	135.3	133.2
Groundnut oil, London, spot price [1]	174.0	238.7	238.7	238.7	238.7
Olive oil, Spanish edible, max. 1% ffa [1]	110.8	118.9	119.8	119.8	119.9
Linseed oil, cif London/Hull [1]	77.0	83.2	100.9	104.6	99.2
Palm oil, crude, London, spot price [1]	178.3	161.7	174.0	176.4	173.2
Coconut oil, cif Europe [1]	184.2	224.7	224.7	271.2	287.3
Castor oil, Brazilian No. 1 grade [1]	178.6	151.7	151.7	155.0	148.1
Crude rubber					
Natural rubber smoked sheet [1]	158.8	178.4	197.8	191.8	196.2
Wood, lumber and cork					
Softwood (delivered to consumers)	144.6	155.1	157.9	163.2	165.9 e
Hardwood (ex yard or wharf)	161.8	184.6	189.6	190.8	191.7
Keruing	122.4	169.5	170.5	169.8	169.6
Ramin	151.5	208.3	220.2	222.2	222.2
Utile	195.0	212.0	212.7	215.0	215.0
Meranti	133.0	163.5	159.4	159.4	164.5
Wood and cork manufactures					
Plywood and blockboard (delivered to consumers	146.0	157.7	161.4	165.3	171.3 e
Pulp and paper					
Woodpulp	91.6	103.2	103.3	101.6	104.6

	1978 Apr	1979 Jan	Feb	Mar p	Apr p
Paper, paperboard and manufactures thereof					
Paper and paperboard	127.3	135.1	135.1	135.1	136.5
Newsprint paper	147.4	159.9	159.9	159.9	159.9
Textile fibres					
Raw wool, greasy or fleece washed, imported	149.9	147.7	155.4	164.6	158.8
Merino	138.6	131.4	136.5	143.6	140.4
Crossbred	164.0	168.0	178.9	190.6	181.7
Raw wool, UK origin	199.2	196.5	203.4	213.2	213.2
Raw wool, UK origin and imported	159.8	157.4	165.0	174.3	169.6
Raw cotton [1]	159.0	162.4	161.8	157.0	150.6
Raw jute [1]	139.0	122.8	118.7	117.5	115.3
Crude fertilisers and crude minerals					
Natural phosphates	74.5	77.0	78.4	78.6	79.3
Asbestos, Canadian, fob Quebec [1]	142.6	141.2	143.6	141.1	141.5
Steatite talc [1]	143.8	143.8	143.8	143.8	166.7
Metalliferous ores and metal scrap					
Bauxite, min. 86% Al_2O_3 [1]	160.1	170.5	170.5	170.5	170.5
Manganese ore, 48-50% Mn grade max. 0.1%P, cif Europe [1]	116.0	107.0	107.3	105.6	103.7
Chrome ore [1]	119.9	110.5	110.9	109.1	107.1
Tungsten ore, min. 65%, cif Europe [1]	191.2	159.1	150.7	168.9	156.7
Titanium ore [1]	114.0	105.4	104.9	102.2	98.8
Non-ferrous metals					
Silver, refined and partly refined [1]	139.1	154.1	183.1	181.9	179.2
Copper, LME settlement price [1]	124.5	147.7	174.1	180.3	181.0
Nickel, free market price [1]	128.2	99.4	107.4	125.7	144.6
Lead, LME settlement price [1]	166.4	265.7	282.0	310.2	299.8
Zinc, producers' price [1]	83.0	99.8	106.2	107.3	105.5
Zinc, LME settlement price [1]	89.3	107.2	118.6	116.1	112.9
Tin ingot, min. 99.75% LME settlement price [1]	192.3	222.8	235.5	238.9	236.4
Magnesium [1]	145.7	145.7	145.7	145.7	145.7
Bismuth [1]	77.4	71.3	71.6	70.4	68.8
Petroleum and petroleum products					
Crude oil [2]	140.6	132.9	132.9	132.9	132.9 e
Chemical elements and compounds					
Mercury, min: 99.99%, cif Europe [1]	122.7	163.7	186.9	203.4	217.2

[1] Source of information: trade publications. [2] Based on unit value of imports at their time of entry. p Provisional. e Estimates which are subject to possible major revision.

Table 5 United Nations index numbers of world export prices [1]

1975 = 100

	Primary commodities: Total $	£	Purchasers' currencies	Agricultural non-food $	£	Purchasers' currencies	Non-ferrous metals $	£	Purchasers' currencies	Primary commodities and non-ferrous metals [1] $	£	Purchasers' currencies
1974 1st qtr	103	108	82	126	133	101	138	145	110	107	113	86
2nd	102	102	77	121	121	92	160	160	122	110	110	83
3rd	104	106	80	119	121	92	120	122	93	106	108	82
4th	106	110	91	112	116	96	105	108	90	106	109	91
1975 1st qtr	102	102	85	103	103	86	104	104	87	102	102	85
2nd	98	101	82	100	103	84	102	105	85	99	102	83
3rd	98	111	87	100	113	89	99	112	88	98	111	87
4th	102	120	92	97	114	87	96	113	86	101	119	91
1976 1st qtr	103	124	94	101	121	92	100	120	91	103	124	94
2nd	105	140	98	107	142	100	111	148	103	106	141	99
3rd	106	144	98	110	149	102	117	159	109	107	145	99
4th	108	157	99	121	176	111	108	157	99	108	157	99
1977 1st qtr	117	164	107	126	176	115	120	168	110	117	164	107
2nd	120	168	108	133	186	120	117	163	105	120	168	108
3rd	116	160	103	118	163	105	114	158	102	116	160	103
4th	116	153	100	117	155	101	117	155	101	116	153	100
1978 1st qtr	118	147	98	122	152	101	119	148	98	118	147	98
2nd	118	154	96	129	169	105	120	157	98	118	154	96
3rd	119	148	92	134	166	104	129	160	100	120	149	93
4th (3)	122	148	91	141	171	106	138	167	103	124	150	93
1979 1st qtr *(4)*	*122*	*145*	*91*	*141*	*168*	*106*	*138*	*164*	*103*	*124*	*148*	93
April *(4)*	*122*	*141*	*91*	*141*	*163*	*106*	*138*	*160*	*103*	*124*	*144*	93

[1] Published by the UN in terms of US dollars. For convenience the index numbers are also shown in sterling and in terms of puchasers' currencies by converting the dollar index at prevailing exchange rates. [2] This combined index is not published as such by the UN. [3] Provisional. [4] Projections by Department of Industry.

We're moving – again

From 21 May, **Trade and Industry** will be at Millbank Tower – see page 286.

Vehicle production: provisional estimate for April

Provisional estimates of vehicle production in the United Kingdom in the four weeks ending 28 April are shown below. More detailed production figures will be published shortly.

Thousands

		Passenger cars		Commercial vehicles	
	No. of weeks	Recorded	Seasonally adjusted (monthly average)	Recorded	Seasonally adjusted (monthly average)
1975	52	1 268	106	380.7	31.7
1976	53	1 333	111	372.1	31.0
1977	52	1 316	110	398.3	33.2
1978	52	1 223	102	384.5	32.0
1978					
Jan	4	111	111	31.1	33.4
Feb	4	108	112	30.7	30.7
Mar	5	139	121	41.9	35.4
Apr	4	119	117	35.0	36.0
May	4	122	104	37.8	34.6
Jun	5	122	108	39.5	34.3
Jul	4	65	96	27.2	33.5
Aug	4	89	115	21.2	31.3
Sep	5	107	107	33.8	32.1
Oct	4	79	83	26.3	26.2
Nov	4	58	55	24.3	24.4
Dec	5	104	95	35.7	32.5
1979					
Jan	4	92	93	32.0	34.5
Feb	4	100	104	37.5	37.7
Mar	5	133	110	50.4	40.3
Apr	4	97	102	36.4	39.9

Inquiries: Department of Industry, Dean Bradley House, 52 Horseferry Road, London SW1P 2AG, tel. 01-212 0788.

Business Monitors

The following titles and issues of Business Monitors are now available:

PRODUCTION SERIES

Monthly at £5.40 each per year post free

PM 33-36 Engineering (volume indices of sales and orders) for January 1979

PM 481 Paper and paper making materials for February 1979

PM 491 Rubber for November 1978

Quarterly at £1.95 each per year post free

PQ 231 Brewing and malting for fourth quarter 1978

PQ 272 Pharmaceutical chemicals and preparations for fourth quarter 1978

PQ 275 Soap and detergents for fourth quarter 1978

PQ 333.3 Compressors and fluid power equipment for third quarter 1978

PQ 339.1 Mining machinery for fourth quarter 1978

PQ 399.6 Metal hollow-ware for fourth quarter 1978

PQ 472 Wooden furniture and upholstery for fourth quarter 1978

PQ 601 Gas for fourth quarter 1978

PQ 602 Electricity for fourth quarter 1978

Copies of specific issues (including back issues) can be ordered by post (payable in advance) from the library at the Business Statistics Office, Newport, Gwent NPY 1XG, tel. 0633 56111, ext. 2973, telex 497121 – answer back BSONPT G.

Regional development grants: first quarter

Companies which have received one or more payments of regional development grant of over £25,000 in the quarter ended 31 March 1979 are listed below. The total of these payments is £80.5 million. The table is drawn up on a regional basis according to the location of the premises in question and does not take account of any repayments of grant by deduction or otherwise.

Applicant	Location of premises	Grant (£'000)
Scotland		
Acna (UK) Ltd	Stevenston	44
Allied Breweries (UK) Ltd	Alloa	342
Anaplast Ltd	Irvine	34
Anderson Strathclyde Ltd	Glasgow	34
Anderson Strathclyde Ltd	Glenrothes	30
Anderson Strathclyde Ltd	Motherwell	71
Anglo Pennsylvanian Oil Co Ltd	Uddingston	42
Arbrook Products Ltd	Livingston	40
Barclay Curle and Co Ltd	Glasgow	64
Bestobell Steam Products Ltd	Livingston	101
Black and Decker (Leasing) Ltd	Edinburgh	104
Borg-Warner Chemicals Ltd	Grangemouth	341
BP Trading Ltd	Grangemouth	508
British Aluminium Co Ltd	Burntisland	30
British Electrical Repairs Ltd	Edinburgh	26
British Rail Engineering Ltd	Springburn	60
British Steel Corporation	Airdrie	36
British Steel Corporation	Bellshill	95
British Steel Corporation	Cambuslang	120
British Steel Corporation	Coatbridge	45
British Steel Corporation	Motherwell	1 813
British Steel Corporation	Wishaw	31
Brown Bros and Co Ltd	Edinburgh	27
Bryant and May Ltd	Glasgow	29
Burroughs Machines Ltd	Cumbernauld	40
Caledonian Tractor and Equipment Co Ltd	Baillieston	25
Carron Company	Falkirk	93
Caterpillar Tractor Co Ltd	Uddington	609
Cartographic Services (Cirencester) Ltd	Bishopbriggs	30
Chancelot Mill Ltd	Leith	71
Christiani and Nielsen Ltd	'S'	123
Ciba-Geigy (UK) Ltd	Paisley	162
City Leasing Ltd	Paisley	35
Colvilles Chigston Shanks Ltd	Motherwell	34
Consolidated Pneumatic Tool Co Ltd	Fraserburgh	77
Culter Mills Paper Co Ltd	Peterculter	53
Davidson Radcliffe Ltd	Aberdeen	367
Don Brothers, Buist and Co Ltd	Forfar	26
East Kilbride Development Corporation	East Kilbride	47
Esso Petroleum Co Ltd	St Fergus	1 799
Ethicon Ltd	Edinburgh	186
First National Bank of Chicago	Falkirk	66
F. Miller (Textiles) Ltd	Glasgow	78
Forward Leasing (UK) Ltd	Aberdeen	72
Forward Leasing (UK) Ltd	Clydebank	34
Gardner Cryogenics Ltd	Nigg	27
General Instrument Microelectronics Ltd	Glenrothes	78
General Motors (Scotland) Ltd	Motherwell	77
Glacier Metal Co Ltd	Kilmarnock	96
Glaxo Operations UK Ltd	Annan	564
Glaxo Operations UK Ltd	Montrose	66
G. R. Stein Refractories Ltd	Bonnybridge	84
G. R. Stein Refractories Ltd	Linlithgow	100
H. and A. Scott Ltd	Dundee	45
Hob Tool and Gauge Company	Hamilton	46
Honeywell Ltd	Motherwell	35
Hoover Ltd	Cambuslang	83
How Group Ltd	East Kilbride	33
IBM United Kingdom Ltd	Greenock	223
IBM United Kingdom Rentals Ltd	Greenock	39
Imperial Chemical Industries Ltd	Dumfries	313
Imperial Chemical Industries Ltd	Grangemouth	679
Imperial Chemical Industries Ltd	Stevenston	55
Imperial Group Ltd (W. D. and H. O. Wills)	Glasgow	60
Inveresk Paper Co Ltd	Denny	35
Invergordon Distillers Ltd	Invergordon	52
Inver House Distillers Ltd	Airdrie	126
James Howden and Co Ltd	Glasgow	73
Jason Metals (Peterhead) Ltd	Peterhead	26
John Dickinson and Co (Paper and Board Division)	Midlothian	49
John M. Henderson and Co Ltd	Aberdeen	27
John Walker and Sons Ltd	Glasgow	29
John Walker and Sons Ltd	Kilmarnock	268
John Walker and Sons Ltd	Shieldhall	195
Kestrel Marine Ltd	Dundee	177
Kingsmead Carpets Ltd	Cumnock	85
Long John International Ltd	Glasgow	51
Martins (Dundyian) Ltd	Coatbridge	94
Massey-Fergusson Perkins Ltd	Kilmarnock	126
MacDermott Scotland	Ardersier	115
McDermott Scotland	Inverness	85
McKellar Watt Ltd	Glasgow	27
McKellar Watt Ltd	Parkhead	29
Metal Box Ltd	Glasgow	163
Michelin Tyre Co Ltd	Dundee	41
Midland Montagu Leasing Ltd	Bathgate	146
Midland Montagu Leasing Ltd	Grangemouth	230
Moray Firth Maltings Ltd	Arbroath	83
Moray Fish Supply	Buckie	47
Motherwell Bridge Pipe Ltd	Motherwell	75
Motorola Ltd	East Kilbride	235
Nairn Floors Ltd	Kirkcaldy	471
National Coal Board	'S'	68
National Semiconductor (UK) Ltd	Greenock	305
Neptune Glenfield Ltd	Kilmarnock	83
New Mar Oil Services Ltd	Aberdeen	26
Nobel's Explosives Co Ltd	Stevenston	308
Norit-Clydesdale Co Ltd	Glasgow	63
North British Steel Group Ltd	Bathgate	55
North Eastern Farmers Ltd	Aberdeen	42
Panmure Tool and Engineering Co Ltd	Arbroath	27
Robert Barr Ltd	Falkirk	27
Robert Hutchinson and Co Ltd	Buckie	75
Rockware Glass Ltd	Irvine	148
Royal Ordnance Factory	Bishopton	61
Scotboard Ltd	Irvine	63
Scottish Agricultural Industries Ltd	Edinburgh	168
Scottish and Newcastle Breweries Ltd	Edinburgh	573
Scottish Malt Distillers Ltd	Elgin	32
Scottish Milk Marketing Board	Paisley	25
Shanks and McEwan (Contractors) Ltd	Coatbridge	31
Shell UK Ltd	St Fergus	1 616
Smith Anderson and Co Ltd	Leslie	40
Spillers Food Ltd	Barrhead	29
Strathclyde Leasing Co Ltd	Edinburgh	33
Strathclyde Leasing Co Ltd	Inverkeithing	31
Synthetic Fabrics (Scotland) Ltd	Forfar	48
Templeton Carpets Ltd	Glasgow	59
Tullis Russell and Co Ltd	Glenrothes	276
Ulstein (UK) Ltd	Fife	25
Uniroyal Ltd	Dumfries	128
United Biscuits Ltd	Glasgow	76
United Wire Ltd	Edinburgh	28
Vale Board Mills Ltd	Denny	32
Vetco Offshore Ltd	Aberdeen	40
Waddie and Co Ltd	Edinburgh	36
Weir Pumps Ltd	Alloa	144
Weir Pumps Ltd	Pollokshields	80
William Collins Sons and Co Ltd	Bishopbriggs	47
William Thyne Ltd	Edinburgh	47
Wm Somerville and Son Ltd	Midlothian	36
Yarrow (Shipbuilders) Ltd	Partick	43
Yarrow (Shipbuilders) Ltd	Scotstoun	487
Total		19 518
Wales		
Aluminium Wire and Cable Co Ltd	Neath	30
AMK Plastics Ltd	Pontyclun	29
BL Cars Ltd	Cardiff	199
BL Cars Ltd	Pengam	40
BP Chemicals Ltd	Port Talbot	59
BP Oil Llandarcy Refinery Ltd	Llandarcy	511
BP Oil Llandarcy Refinery Ltd	Swansea	87
BP Trading Ltd	Port Talbot	1 373
BP Trading Ltd	Sully near Penarth	611
Bowater Containers Ltd	Newport	37
British Steel Corporation	Deeside	329
British Steel Corporation	Ebbw Vale	284
British Steel Corporation	Llanelli	65
British Steel Corporation	Pontypool	75
British Steel Corporation	Port Talbot	2 099
British Steel Corporation	Swansea	27
British Tissues Ltd	Bridgend	26
Brymbo Steel Works Ltd	Brymbo	1 260
Catnic Components Ltd	Caerphilly	27
CBS (UK) Ltd	Bridgend	88
Chubb File Security Ltd	Ferndale	31
Ci Fasteners Ltd	Merthyr Tydfil	39
Courtaulds Ltd (Heron Fabrics)	Flint	85
Duport Steels Ltd	Llanelli	317
Esso Petroleum Co Ltd	Milford Haven	492
Firestone Tyre and Rubber Co Ltd	Wrexham	31
Ford Motor Co Ltd	Bridgend	784
Forth Chemicals Ltd	Port Talbot	411
George Cohen Sons and Co Ltd	Morriston	61
GKN (South Wales) Ltd	Cardiff	146
Golden Ltd	Pontyclun	49
Golden Wonder Ltd	Crumlin	51

Continued on next page

Applicant	Location of premises	Grant (£'000)
Graham Manufacturing Ltd	Abercarn	28
Gregor Bros Ltd	*Morriston*	61
Gulf Oil Refinery Ltd	Milford Haven	110
Hoover Ltd	Merthyr Tydfil	258
Hymac Ltd	*Rhymney*	36
Imperial Chemical Industries Ltd	Pontypool	343
ITT Creed Ltd	Pontypridd	43
J. Bibby Agriculture Ltd	*Carmarthen*	155
John Williams of Cardiff Ltd	Cardiff	37
Kellogg Company of Great Britain Ltd	Wrexham	108
Kronospan Ltd	Chirk	70
Lombard North Central Leasing Ltd	Bridgend	57
Lombard North Central Leasing Ltd	Port Talbot	138
Lucas Trading Ltd	*Pontypool*	41
MBZ Joint Venture	'S'	28
Metal Box Ltd	Neath	326
Mettoy Co Ltd	*Swansea*	61
Midland Montagu Leasing (UK) Ltd	Deeside	114
Midland Montagu Leasing (UK) Ltd	Port Talbot	189
Midland Poultry Holdings Ltd	Llangefni	79
Monsanto Ltd	Newport	97
Monsanto Ltd	Wrexham	262
Myson Radiators (Wales) Ltd	Cardiff	94
Nash Rocks Store and Line Co Ltd	Presteigne	29
National Coal Board	Abertridwr	43
National Coal Board	Ammanford	37
National Coal Board	Blackwood	217
National Coal Board	Bridgend	26
National Coal Board	Cardiff	34
National Coal Board	Crynant Neath	73
National Coal Board	Cwm	43
National Coal Board	Glynneath	54
National Coal Board	Llantwit Fardre	165
National Coal Board	Maerdy	65
National Coal Board	Maesteg	83
National Coal Board	Mountain Ash	27
National Coal Board	Oakdale	45
National Coal Board	Ogwr	128
National Coal Board	Rhostyllen	32
National Coal Board	Rhydyfro	61
National Coal Board	Swansea	66
National Coal Board	Taffs Well	67
National Coal Board	Treharris	30
National Coal Board	Ynysybwl	34
Pembroke Cracking Co	Milford Haven	110
Pembroke Cracking Co	Pembroke	1 773
Penny and Giles Conductive Plastics Ltd	Blackwood	29
Pilkington PE Ltd	St Asaph	26
P. Leiner and Sons (Wales) Ltd	Pontypridd	33
Precision Circuits Ltd	Ystradgynlais	58
Revlon Overseas Corporation	Maesteg	29
Rexham (UK) Ltd	Wrexham	104
RHM Bakeries (Midlands) Ltd	Taffs Well	46
Rockwool Ltd	Pencoed	484
Royal Mint	Pontyclun	29
Sekisui (UK) Ltd	Merthyr Tydfil	92
Sony (UK) Ltd	Bridgend	102
Tetra Pak Rausing and Co Ltd	Wrexham	160
TPS (Techigraphics) Ltd	Cardiff	28
Total		16 950

Northern

Albright and Wilson Ltd	Whitehaven	504
Alcan Lynemouth Ltd	Ashington	320
Allen-Bradley Electronics Ltd	Jarrow	45
Amoco (UK) Ltd	Consett	33
A. Ogden and Sons Ltd	'S'	101
Armstrong Cork Co Ltd	Thornaby	55
Beecham Foods Beecham Group Ltd	Newcastle	99
BOC Ltd	Middlesbrough	313
BP Trading Ltd	Middlesbrough	1 137
British Chrome and Chemicals Ltd	Stockton	318
British Gypsum Ltd	Penrith	29
British Industrial Plastics Ltd	Aycliffe	594
British Nuclear Fuels Ltd	Windscale	306
British Rail Engineering Ltd	Shildon	32
British Steel Corporation	Consett	88
British Steel Corporation	Hartlepool	685
British Steel Corporation	Lackenby	580
British Steel Corporation	Middlesbrough	199
British Steel Corporation	Redcar	644
British Steel Corporation	Skinningrove	34
British Steel Corporation	Weardale	43
British Steel Corporation	Workington	296
BSC (Chemicals) Ltd	Middlesbrough	305
Carreras Rothmans Ltd	Darlington	496
C. Herring and Son Ltd	Hartlepool	35
Coles Cranes Ltd	Sunderland	38
Commercial Plastics Ltd	Cramlington	35
Courtaulds	Belmont	770
David Brown Gear Industries Ltd	Sunderland	59
Electrolux Ltd	Darlington	110
Expanded Metal Co Ltd	Hartlepool	37
Gibbons Northern Brick Ltd	Throckley	36
Glaxo Operations UK Ltd	Barnard Castle	192
Glaxo Operations UK Ltd	Ulverston	118
Head Wrightson Stampings Ltd	Hartlepool	55
Hepworth and Grandage Ltd	Sunderland	40
Independent Polythene Extruders Ltd	Brampton	38
Imperial Chemical Industries Ltd	Billingham	3 309
Imperial Chemical Industries Ltd	Middlesbrough	3 980
Imperial Chemical Industries Ltd	*Middlesbrough*	569
Imperial Chemical Industries Ltd	Wilton	407
Jackson Plant	Washington and Hexham	25
Kimberley-Clark Ltd	Lower Prudhoe	51
Kimberley-Clark Ltd	Prudhoe	446
K Shoemakers Ltd	*Kendal*	31
Lombard North Central Leasing Ltd	Redcar	25
Metal Spinners (Newcastle) Ltd	*Newcastle*	33
Monsanto Ltd	Middlesbrough	1 308
Monsanto Ltd	Middlesbrough	202
Mullard Ltd	*Durham*	153
National Coal Board	Boldon	39
National Coal Board	Easington	139
National Coal Board	Horden	188
National Coal Board	Peterlee	190
National Coal Board	Seaham	28
National Coal Board	Stanley	58
Newalls Insulation Co Ltd	Middlesbrough	36
Newalls Insulation Co Ltd	Washington	173
Newcastle Chronicle and Journal Ltd	Newcastle	38
Norpipe Petroleum UK Ltd	Seal Sands, Middlesbrough	321
Norsea Pipeline Ltd	Middlesbrough	451
Norsea Pipeline Ltd	Seal Sands, Middlesbrough	533
Northern Clubs Federation Brewery Ltd	Gateshead	171
Northern Engineering Industries Ltd	Newcastle	126
Philip E. Allick Ltd	Middlesbrough	55
Phillips-Imperial Petroleum Ltd	Middlesbrough	32
Polyamide Intermediates Ltd	Middlesbrough	216
Raynesway Plant Ltd	Seascale	43
RHM Foods Ltd	Hartlepool	63
Rohm and Haas (UK) Ltd	Jarrow	27
Rohm and Haas (UK) Ltd	Middlesbrough	198
Rose Forgrove Ltd	Gateshead	29
Rowntree Mackintosh Ltd	Newcastle	31
Shawlands Leasing Ltd	Sunderland	47
Shell UK Ltd	Middlesbrough	136
Smart and Brown Engineers Ltd	Spennymoor	27
Smith and Walton Ltd	Haltwhistle	42
Smith Brothers (Whitehaven) Ltd	Whitehaven	27
Smith Brothers (Whitehaven) Ltd	Workington	118
Smiths Ship Repairers North Shields Ltd	North Shields	27
Steetley Minerals Ltd	Ferryhill	186
Steetley Refractories Ltd	Hartlepool	121
Sterling Winthrop Group Ltd	Dudley	30
Swiss Aluminium Mining (UK) Ltd	Bishop Auckland	328
Tarmac Roadstone Holdings Ltd	Barrasford	40
Taylor Woodrow Construction Ltd	Morpeth	66
Thorn Heating Ltd	Birtley	48
T. I. Churchill Ltd	Balydon on Tyne	249
Torrington Co Ltd	Darlington	28
Tynemouth Ice Ltd	North Shields	48
Union Carbide UK Ltd	Aycliffe	42
United Biscuits (UK) Ltd	Billingham	38
Vaux Breweries Ltd	Sunderland	26
Vickers Shipbuilding Group Ltd	Barrow-in-Furness	29
Wavin Plastics Ltd	Brandon	159
Weldit Engineering (Fabricators) Ltd	Barrow-in-Furness	85
William Brown's Saw Mills Ltd	Darlington	105
Total		24 595

Yorkshire and Humberside

Allied Colloids Ltd	Bradford	69
BP Trading Ltd	Hull	325
British Gypsum Ltd	Leeds	33
British Steel Corporation	Rotherham	100
British Steel Corporation	Scunthorpe	442
British Steel Corporation	Sheffield	73
BSC (Chemicals) Ltd	Orgreave Works	41
Burgess Feeds Ltd	Pickering	27
Capper Pass Ltd	North Ferriby	111
Carpets International (Northern) Ltd	Northallerton	26
Charles Hagenbach and Sons Ltd	Wakefield	27
Croda Premier Oils Ltd	Hull	27
Davy-Loewy Ltd	Sheffield	103
Doverstrand Ltd	Stalling-borough	31
Drum Engineering Co Ltd	Bradford	39
Europower Hydraulics Ltd	Market Weighton	27
Firth Brown Ltd	Sheffield	147
Fisons Ltd	Immingham East	147
G. M. Firth (Metals) Ltd	Bradford	43
Hepworth and Grandage Ltd	Bradford	30
Howarth Timber Group Ltd	Leeds	42
Howarth (Timber Importers) Ltd	New Holland	35
Landis Lund Ltd	Keighley	28
Leeds and District Dyers and Finishers Ltd	Yeadon	80
Lytag Ltd	Hensall	104
Midland Montagu Leasing Ltd	Hull	35
National Coal Board	*Dinnington/ Sheffield*	285
National Coal Board	Royston	48
National Coal Board	*Thurcroft, Rotherham*	121
National Coal Board	Wath-on-Dearne	35
Northern Dairies Creameries Ltd	Northallerton	78
Nypro (UK) Ltd	Scunthorpe	145
Reckitt and Colman Products Ltd	*Hull*	121
Reckitt and Sons Ltd	Hull	76
Reckitts' (Colours) Ltd	Hull	78
Regina-Fibreglass Ltd	*Liversedge*	59
RMI (Bingley) Ltd	Bingley	29
Robert Glew Wool Industries Ltd	Bradford	114
Ross Buxted Nitrovit Ltd	*Thirsk*	64
Rowntree Mackintosh Ltd	York	44
S. H. Ward and Co Ltd	Sheffield	34
Stelrad Group Ltd	Mexborough	27
Total		3 550

East Midlands

Kodak Ltd	Nottingham	554
Stevensons (Fabric Dyers) Ltd	Somercotes	98
Total		652

South West

Arthur H. Cox and Co Ltd	Barnstaple	27
Barclays Mercantile Industrial Finance Ltd	Barnstaple	32
English Clays Lovering Pochin and Co Ltd	Lee Moor	35
English Clays Lovering Pochin and Co Ltd	St Austell	783
J. and F. Pool Ltd	Hayle	28
Kendall Co (UK) Ltd	Braunton	29
Metal Tray Manufacturing Co Ltd	Penryn	58
Unigate Foods Ltd	Hayle	59
Western Excavating ECC Ltd	St Austell	43
Total		1 094

North West

Adamson Containers Ltd	Stockport	42
Albright and Wilson Ltd	Widnes	218
Associated Biscuits Ltd	Liverpool	47
Associated Biscuits Ltd	Prescot	85
Associated Octel Co (Plant) Ltd	Ellesmere Port	274
Barclays Mercantile Industrial Finance Ltd	Manchester	64
Bass Holdings Ltd	Runcorn	670
BICC Ltd	Liverpool	262
Boalloy Ltd	Congleton	27
BOC Ltd	Bromborough	34
Bowaters UK Paper Co Ltd	Ellesmere Port	35
British Leyland UK Ltd	Leyland	138
British Nuclear Fuels Ltd	Capenhurst	137
British Nuclear Fuels Ltd	Preston	87
Bryant and May Ltd	Liverpool	70
Buckstones Motor Bodies Ltd	Shaw, Oldham	45
Burmah Oil Trading Ltd	Ellesmere Port	32
Carrington Viyella Properties Ltd	Stockport	33
Ciba-Geigy (UK) Ltd	Manchester	38
Continental (London) Ltd	Liverpool	108
Cross International AG	Liverpool	52
Crown Decorative Products Ltd	Darwen, Blackburn	26
Dewrance and Co Ltd	Skelmersdale	27
Dibro Ltd	Liverpool	29
Dunlop Ltd	Wigan	26
E. R. Squibb and Sons Ltd	Moreton	57
Evans Medical Ltd	Liverpool	93
Fine Art Development Ltd	Accrington	42
Ford Motor Co Ltd	Liverpool	340
Frederick Robinson Ltd	Bredbury, Stockport	57
Garrett Airesearch Ltd	Skelmersdale	38
GEC Distribution Switchgear Ltd	Manchester	47
GEC Switchgear Ltd	Manchester	51
Geo L. Scott and Co Ltd	Ellesmere Port	67
Girling Ltd	Bromborough	27
Imperial Chemical Industries Ltd	Darwen	39
Imperial Chemical Industries Ltd	Fleetwood	74
Imperial Chemical Industries Ltd	Macclesfield	1 098
Imperial Chemical Industries Ltd	Northwich	118
Imperial Chemical Industries Ltd	Runcorn	2 122
Imperial Chemical Industries Ltd	Widnes	266
J. Bibby and Sons Ltd	Liverpool	55
John Dickinson and Co Ltd	Liverpool	30
Kodak Ltd	Liverpool	132
Laporte Industries Ltd	Widnes	253
Lever Brothers Ltd	Port Sunlight	117
Leyland Vehicles Ltd	Leyland	1 051
Lilly Industries Ltd	Liverpool	45
Liverpool Central Oil Co Ltd	Liverpool	27
Liverpool Daily Post and Echo Ltd	Liverpool	46
McTay Marine Ltd	Bromborough	41
Morganite Ceramic Fibres Ltd	Bromborough	29
National Coal Board	Cronton, Whiston	109

Applicant	Location of premises	Grant (£'000)
National Coal Board	St Helens	591
Oldham Batteries Ltd	Manchester	49
Pilkington Brothers Ltd	St Helens	93
Plessey Telecommunications Ltd	Liverpool	40
Ravenhead Brick Co Ltd	Skelmersdale	48
Regina-Fibreglass Ltd	St Helens	106
Rentokil Group Ltd	Kirkby	26
Rockware Glass Ltd	St Helens	224
Rolls-Royce Motors Ltd	Crewe	46
Royal Ordnance Factory	Radway Green	41
R. Taylor Engineering and Plastics (1977) Ltd	Rochdale	35
Runcorn Development Corporation	Runcorn	25
Saturn Industrial Gases Ltd	Ellesmere Port	713
Serlachius Converting Ltd	Skelmersdale	98
Shell UK Ltd	Ellesmere Port	482
Skelmersdale Development Corporation	Skelmersdale	147
Solid Waste Engineering Ltd	Bamber Bridge, Preston	31
Star Paper Ltd	Blackburn	37
Storey Bros and Co Ltd	Morecambe	26
Synthetic Resins Ltd	Liverpool	150
Tillotsons (Liverpool) Ltd	Liverpool	59
Tootal Ltd	St Helens	25
Transparent Paper Ltd	Bury	30
Turner and Newall Ltd	Widnes	62
UG Glass Containers Ltd	St Helens	26
UKF Fertilisers Ltd	Ince, Chester	31
UML Ltd	Port Sunlight	139
Unichema Chemicals Ltd	Bebington	241
Van den Berghs and Jurgens Ltd	Bromborough	35
Vauxhall Motors Ltd	Ellesmere Port	1 073
Victor Wolf Ltd	Manchester	52
Viota Foods Ltd	Bromborough	38
Warburtons Estates Ltd	Bolton	29
Whitbread and Co Ltd	Samlesbury	164
Whitehead and Poole Ltd	Radcliffe, Manchester	29
W. W. Hill Son and Wallace Ltd	Salford	51
Total		14 169

Note
'S' indicates use in more than one premises or sites in a development area.

Particulars of dealers in securities and of unit trusts

The following changes have taken place in parts 1 and 5 of the 1978 edition of 'Particulars of dealers in securities and of unit trusts' published in May under the Prevention of Fraud (Investments) Act 1958:

Part 1 Holders of principal's licences

Name	Nationality or country of incorporation	Address
Additions		
Whittingdale Ltd	Great Britain	128-9 Cheapside, London EC2V 6BT
Change of address		**To**
Schlesinger Investment Management Services Ltd		16 Hans Road, London SW3 1RS

Part 5 Authorised unit trust schemes

Group and/or name and address of management company	Scheme	Trustee
Additions		
Chieftain Trust Managers Ltd. Chieftain House, 11 New Street, London EC2M 4TP	Chieftain Preference and Gilts Trust	Midland Bank Trust Co Ltd, 27-32 Poultry, London EC2P 2BX
Craigmount Unit Trust Managers Ltd, 6th Floor, St Martin's House, 16 St Martin's-le-Grand, London EC1A 4EP	Craigmount Canadian Exempt Trust	The Governor and Company of the Bank of Scotland, The Mound, Edinburgh EH1 1YZ
Stratton Trust Managers Ltd, 8 Bishopsgate, London EC2N 4AE	Stratton Smaller Companies Exempt Fund	Williams and Glyn's Bank Ltd, 20 Birchin Lane, London EC3P 3DP
Correction In the entry against Cosmopolitan Fund Managers Ltd		
Delete Cosmopolitan Overseas Ltd		**And replace by** Cosmopolitan Overseas Fund

Insurance Companies Act 1974: authorisations and revocations

The following authorisations to carry on insurance business in Great Britain were issued by the Secretary of State for Trade under section 3(1) of the Insurance Companies Act 1974 during the period 1 April to 30 April 1979:

Name of insurer and registered office or address in GB	Country of incorporation if outside GB	Date of authorisation	Class or classes of insurance business for which authorisation was issued
Mercator Algemene Verzekeringsmaatschappij NV, 22 Billiter Street, London EC3M 2SA	Belgium	20.4.79	1, 3, 4, 6, 7, 8, 9, 10, 12, 13
La Mutuelle du Mans Incendie Societe d'Assurance et de Reassurance a forme mutuelle et a cotisations fixes, Norman Insurance House, Kings Road, Reading, Berkshire	France	20.4.79	1, 2, 7, 8, 9, 13, 16, 17

The following authorisations to carry on insurance business in Great Britain were revoked by the Secretary of State for Trade under section 9 of the Insurance Companies Act 1974 during the period 1 April to 30 April 1979.

Name of insurer and registered office or address in GB	Country of incorporation if outside GB	Date of revocation	Class or classes of insurance business for which authorisation was revoked
IGAL Ltd, 64 Clifton Street, London EC2	—	23.4.79	OLT

Classes of business

OLT	Ordinary long term insurance business
IND	Industrial assurance business
1	Accident insurance business
2	Sickness insurance business
3	Land vehicles insurance business
4	Railway rolling stock insurance business
5	Aircraft insurance business
6	Ships insurance business
7	Goods in transit insurance business
8	Fire and natural forces insurance business
9	Damage to property insurance business
10	Motor vehicle liability insurance business
11	Aircraft liability insurance business
12	Liability for ships insurance business
13	General liability insurance business
14	Credit insurance business
15	Suretyship insurance business
16	Miscellaneous financial loss insurance business
17	Legal expenses insurance business

Patents recorded 'licences of right'

Under section 46 of the Patents Act 1977 the register was noted 'licences of right' in respect of the following patents on the date specified:

18 April 1979

1130108 Matsushita Electric Industrial Co Ltd
Improvements in and relating to electric resistors
1141896 Matsushita Electric Industrial Co Ltd
Improvements in and relating to piezoelectric materials
1151050 Matsushita Electric Industrial Co Ltd
Improvements in and relating to electromechanical resonator devices
1168190 Matsushita Electric Industrial Co Ltd
A method for making ferromagnetic chromium dioxide
1170207 Matsushita Electric Industrial Co Ltd
Magnetic tape cassette changer
1176447 Matsushita Electric Industrial Co Ltd
Reversible driving means especially for automatic tuning means
1184872 Matsushita Electric Industrial Co Ltd
Piezoelectric ceramic resonator
1226220 Matsushita Electric Industrial Co Ltd
Improvements in and relating to electric storage cells
1234654 Matsushita Electric Industrial Co Ltd
Electrical rice cooking appliance
1258106 Matsushita Electric Industrial Co Ltd
Temperature control device
1262008 Matsushita Electric Industrial Co Ltd
Improvements in and relating to electric secondary cells
1263529 Matsushita Electric Industrial Co Ltd
Improvements in and relating to electric cells and electrods therefor
1263773 Matsushita Electric Industrial Co Ltd
Record player
1268942 Matsushita Electric Industrial Co Ltd
Glass acoustic delay line
1268963 Matsushita Electric Industrial Co Ltd
Cross-colour eliminating apparatus for a television receiver
1269853 Matsushita Electric Industrial Co Ltd
A magazine for storing tape cassettes
1271429 Matsushita Electric Industrial Co Ltd
Improvements in and relating to electric circuit arrangements
1271617 Matsushita Electric Industrial Co Ltd
Improvements in and relating to contact greases
1299905 Matsushita Electric Industrial Co Ltd
Electrophoretic method of image reproduction
1308158 Matsushita Electric Industrial Co Ltd
Improvements in and relating to magnetic record apparatus
1308192 Matsushita Electric Industrial Co Ltd
Tape recorder
1309572 Matsushita Electric Industrial Co Ltd
Improvements in and relating to signal apparatus
1313412 Matsushita Electric Industrial Co Ltd
Electrophoretic image reproduction device
1313413 Matsushita Electric Industrial Co Ltd
Electrophoretic method of image reproduction
1313775 Matsushita Electric Industrial Co Ltd
Electrophoretic image reproduction device

Continued on next page

First with the facts

Every week, Trade and Industry brings you up-to-date facts and figures. Its direct access to government information makes Trade and Industry unique, presenting material which is not only authoritative but often unavailable from any other source.

Trade and Industry can help to keep you and your business a step ahead.

Often quoted directly and at length by other business publications, it contains a wealth of data relating to trade, industry, exports, prices, technology and statistics.

Always objective, always reliable, Trade and Industry brings information from official sources worldwide.

To get your regular copy, complete the subscription form on the readers' reply service page and post to:

Trade and Industry

50p weekly can help you make the right decisions

1314906 Matsushita Electric Industrial Co Ltd
Improvements in and relating to display devices
1318931 Matsushita Electric Industrial Co Ltd
Improvements in and relating to electric switches
1341368 Matsushita Electric Industrial Co Ltd
Treatment of barium titanate ceramics
1346228 Matsushita Electric Industrial Co Ltd
Improvements in and relating to magnetic record apparatus
1352889 Matsushita Electric Industrial Co Ltd
Improvements in and relating to image display apparatus
1354658 Matsushita Electric Industrial Co Ltd
Improvements in and relating to the manufacture of emissive materials and devices
1355068 Matsushita Electric Industrial Co Ltd
Improvements in and relating to envelope openers
1357420 Matsushita Electric Industrial Co Ltd
Improvements in and relating to the manufacture of electroluminescent material
1361843 Matsushita Electric Industrial Co Ltd
Improvements in and relating to methods of and apparatus for recording
1365212 Matsushita Electric Industrial Co Ltd
Improvements in and relating to signal apparatus
1371492 Matsushita Electric Industrial Co Ltd
Improvements in and relating to magnetic materials
1384944 Matsushita Electric Industrial Co Ltd
Improvements in and relating to variable transfer signal apparatus
1387928 Matsushita Electric Industrial Co Ltd
Improvements in and relating to display devices
1393613 Matsushita Electric Industrial Co Ltd
Improvements in and relating to magnetic record apparatus
1395871 Matsushita Electric Industrial Co Ltd
Improvements in and relating to semi-conductor devices
1396486 Matsushita Electric Industrial Co Ltd
Improvements in and relating to display apparatus
1399263 Matsushita Electric Industrial Co Ltd
Improvements in and relating to tuning mechanisms for radio frequency tuners
1399264 Matsushita Electric Industrial Co Ltd
Improvements in and relating to radio frequency tuners
1403657 Matsushita Electric Industrial Co Ltd
Method of increasing the photo-conductivity of a photoconductive powder
1417291 Matsushita Electric Industrial Co Ltd
Method of making a photo-conductive layer
1428415 Matsushita Electric Industrial Co Ltd
Improvements in and relating to television apparatus
1429558 Matsushita Electric Industrial Co Ltd
Improvements in and relating to video tape recorders
1431806 Matsushita Electric Industrial Co Ltd
Improvements in and relating to magnetic tape recording apparatus
1433256 Matsushita Electric Industrial Co Ltd
Improvements in and relating to gas discharge display devices
1434135 Matsushita Electric Industrial Co Ltd
Magnetic tape reproducing system
1435568 Matsushita Electric Industrial Co Ltd
Magnetic recording apparatus
1436228 Matsushita Electric Industrial Co Ltd
Magnetic head and method of making same
1439028 Matsushita Electric Industrial Co Ltd
Improvements in and relating to display devices
1448162 Matsushita Electric Industrial Co Ltd
Improvements in and relating to piezoelectric materials

27 April 1979

1163047 Matsushita Electronics Corporation
A colour picture tube
1176211 Matsushita Electronics Corporation
A method of manufacturing fluorescent lamps
1177144 Matsushita Electronics Corporation
Cathode-ray tube for colour television and phosphors therefor
1217716 Matsushita Electronics Corporation
A process for forming a titanium dioxide film
1257505 Matsushita Electronics Corporation
Magnetron devices
1260544 Matsushita Electronics Corporation
Method for manufacturing semi-conductor device
1261340 Matsushita Electronics Corporation
Pressure-sensitive solid-state device
1284374 Matsushita Electronics Corporation
A stable multi-vibrator circuit
1288473 Matsushita Electronics Corporation
A semi-conductor device having a $TiO_2 - SiO_2$ composite oxide layer
1294617 Matsushita Electronics Corporation
Synchronising signal separating circuit
1318994 Matsushita Electronics Corporation
Phosphor and method for preparing the same
1347044 Matsushita Electronics Corporation
A stable multi-vibrator
1354315 Matsushita Electronics Corporation
Fluorescent lamp
1367030 Matsushita Electronics Corporation
Method of manufacturing high breakdown voltage rectifiers
1388883 Matsushita Electronics Corporation
Apparatus and method of manufacturing colour picture tubes
1409330 Matsushita Electronics Corporation
Electric light-emitting apparatus
1419342 Matsushita Electronics Corporation
Process for producing quartz glass
1419865 Matsushita Electronics Corporation
Optical remote-control apparatus
1425199 Matsushita Electronics Corporation
Pulsed light type control system
1428740 Matsushita Electronics Corporation
Electric light-emitting apparatus
1442915 Matsushita Electronics Corporation
Colour picture tube

1140078 Automotive Products Ltd
Improvements in or relating to disc brakes
1417843 Automotive Products Ltd
Disc brake systems
1417994 Automotive Products Ltd
Setting running clearance in brakes and other apparatus
1429629 Automotive Products Ltd
Improvements in or relating to vehicle brake operating devices and to brake assemblies
1456004 Automotive Products Ltd
Improvements in or relating to brake assemblies for motor vehicle disc brakes
1507144 The Post Office
Apparatus for drawing dielectric optical waveguides
1507145 The Post Office
Drawing dielectric optical waveguides
1507711 The Post Office
Improvements in or relating to glass for use in dielectric optical waveguides
1507712 The Post Office
Improvements in or relating to the preparation of alkalimetal-boro-silicate glasses
1517537 The Post Office
Improvements in or relating to lasers and photo-detectors
1120779 Daimler-Benz Aktiengesellschaft
Improvements relating to removable panels for motor vehicles
1138787 Daimler-Benz Aktiengesellschaft
Improvements relating to servo-steering systems for vehicles
1266100 Daimler-Benz Aktiengesellschaft
Improvements relating to brake-band guides in automatic change-speed gearing
1414288 Poclain
Improvements in control circuits
1426133 Poclain
Improvements in or relating to clam-shell buckets
1427864 Poclain
Improvements in or relating to receivers in public works machines
1264426 West Electric Co Ltd
Electronic flash apparatus for photography
1320644 West Electric Co Ltd
Electronic flash device for photography
1359035 West Electric Co Ltd
Electronic photographic flash apparatus
1499659 Orton Saws Ltd
Band saw swaging tool
1502667 Orton Saws Ltd
Band saw shaping tool
1429445 Hunt West Ltd
Improved method for wrapping elgongate cylindrical objects
1529420 Schottel Werft Josef Becker GmbH and Company KG
Reversing of water craft having steerable drive power generators

Any person who claims that the proprietor of the patent is, and was at the time of entry, precluded by a contract in which the claimant is interested from granting licences under the patent may, within three months after the making of the relevant entry, apply to the Comptroller on patents form 31/77 for cancellation of the entry.

I. J. G. Davis, Comptroller

Endorsement 'licences of right' cancellation

Under section 36 of the Patents Act 1949, the following application for cancellation of endorsement 'licences of right' has been received:

1294147 Ali Bindernagel
Improvements in or relating to casting of metals

Any person may give notice of opposition to the application by filing patents form 46 at the Patent Office, 25 Southampton Buildings, London WC2A 1AY, within one month from the date of publication of the *Official Journal (Patents)* dated 23 May 1979.

I. J. G. Davis, Comptroller

April steel production up

Steel production in Britain averaged 459 000 tonnes a week in April, the highest rate of output in any month since November 1976. The April figure showed an increase of 4.7 per

cent on the previous month and was 4.1 per cent higher than in April 1978.

This increased level of activity continued the pattern of March, when an improved short term order position reflected the effects of output losses caused by transport disputes and bad weather earlier in the year. Merchants are reported to be re-building stocks depleted in the first quarter.

British Film Fund Agency returns

The British Film Fund Agency has authorised the publication of the following information for the five weeks ended 31 March:

	£
Distributors' earnings submitted	
Low-cost films:	
Eligible (after multiplying by 2½)	42 760
Not eligible for 2½ times rental	40 435
	83 195
High cost films (including newsreels after multiplying by 2½)	1 256 340
	1 339 535
Films under 3000 ft (after multiplying by 2½)	372 038
	1 711 573
Levy collections paid to agency by HM Customs and Excise to 3 April 1979 including an estimate of collections approximately covering entertainments for the five weeks ended 31 March 1979	779 000

The fifth interim allocation for the twenty-second year will be at the rate of 38 per cent.

Registrations of British, community and foreign films

The following are details of films registered by the Department of Trade under the Films Acts 1960 to 1970, as amended by the European Communities Act 1972, during the week ended Friday, 11 May 1979.

BR/E indicates that the film is a British quota film, EC that the film is a quota film. The date which forms part of the registration number of each is the date on which quota life of the film expires.

Title of film	Registered no.	Playing time minutes	Date of registration	Registered in the name of	Maker's name
BRITISH					
Review No. 9 (32nd Year)	BR/E 40029/12/5/84	9	8 May	Data Film Distributors Ltd	The National Coal Board
The Lady Vanishes	BR/E 40030/12/5/84	99	9 May	Rank Film Distributors Ltd	Hammer Films Ltd
Romantic Summer	BR/E 40035/12/5/84	18	11 May	Columbia-EMI-Warner Distributors Ltd	John Dooley T/A Polonius Film Services
Movietone News 2605	BR/E 39846/12/5/84	8	11 May	British Movietonews Ltd	British Movietonews Ltd
FOREIGN					
Big Wednesday	F 40031	119	9 May	Columbia-EMI-Warner Distributors Ltd	Warner Bros. Inc, California
Queen Of Sex	F 40032	76	10 May	Ranworth Film Services Ltd	Spectacular Film Productions SrL, Rome
Target Harry	F 40033	83	11 May	Brent Walker Film Distributors Ltd	American Broadcasting Companies Inc, New York
Sweet Revenge	F 40034	90	11 May	Cinema International Corporation (UK)	MGM Inc, California

Index to statistics published regularly in 'Trade and Industry'

(a) annually (m) monthly (q) quarterly Weekly statistics are not included

Aerospace cost indices (m) 4 May 79
Air transport trade by air (a) 25 Aug 78
Balance of payments current account (m) 23 Mar 79
summary (q) 30 Mar 79
overseas royalties 12 Aug 77
trends in invisibles 6 Apr 79
see also Overseas trade of the UK
Business names and limited partnerships (a) 23 Mar 79
Capital expenditure manufacturing, distributive and service industries (q) 6 Apr 79
provisional (q) 2 Mar 79
by regions 18 Feb 77
leasing, hiring and renting out (a) 29 Sep 78
see also Investment
Catering trades turnover (q) 16 Feb 79
Check trading (a) page 311
Chemicals industry activity (q) 27 Apr 79
Companies acquisitions and mergers (q) 11 May 79
analysis of accounts (q) 7 Jul 78
insolvencies (q) 4 May 79
liquidity (q) 9 Mar 79
new registrations: Gt. Britain (m) 2 Mar 79
N. Ireland (m) 4 May 79
rate of return on capital (a) 22 Sep 78
structure of company financing (a) 16 Feb 79
Construction industry housing report (m) 16 Mar 79
orders (m) 30 Mar 79
output and employment (q) 23 Mar 79
private enterprise housebuilding (m) 16 Feb 79
work overseas (a) 20 Oct 78
Consumers' expenditure (q) 4 May 79
Depositors, protection of, Act (q) 20 Apr 79
Earnings, wage rates (m) 27 Apr 79
Energy trends 23 Mar 79
Engineering industries electrical engineering (q) 20 Apr 79
instrument engineering (a) 6 Apr 79
production indices (m) 27 Apr 79
sales and orders (m) 20 Apr 79
Film industry British Film Fund Agency returns (m) page 323
British Film Fund distributions 27 Apr 79
cinema admissions and takings (m) 27 Apr 79
annual inquiry (a) 25 Aug 78
exhibitors' quota returns (a) 4 May 79
overseas payments and earnings (a) 25 Aug 78
registrations of films (a) 23 Feb 79
Food consumption levels (twice a year) 29 Sep 78
household consumption (q) 23 Mar 79
Footwear industry deliveries and stocks (m) 4 May 79
Foreign trade industrial countries' economic indicators (m) 4 May 79
quarterly analysis (q) 2 Mar 79
see also Overseas trade of the UK
Furniture deliveries and orders (m) 20 Apr 79
Gross domestic product (q) 30 Mar 79
Health and safety 11 Aug 78
Hire purchase business (m) 11 May 79
Housing *see* Construction industry
Industrial production index numbers (m) 27 Apr 79
Scotland (q) 26 Jan 79
Wales (q) 11 May 79
Insurance companies authorisations and revocations (m) page 321
investment (q) 27 Apr 79
investments and assets (a) 10 Nov 78
Investment book values of overseas direct investment 23 Mar 79
industry's investment intentions (3 times a year) 5 Jan 79
manufacturing industries in fixed assets 30 Mar 79
10-year review (a) 27 Oct 78
investment and earnings overseas (a) 9 June 78
see also Capital expenditure, insurance companies, and pension funds
Land and building sales (a) 11 May 79
Made-up clothing orders and deliveries (m) 20 Apr 79
Man-made fibres deliveries (q) 2 Mar 79
production (m) 27 Apr 79
quarterly analysis (q) 2 Mar 79
Metal-working machine tools (m) 4 May 79
Moneylenders Acts (q) 20 Apr 79
Motor industry car and commercial vehicle production (m) 4 May 79
provisional (m) page 319
motor trade turnover (q) 23 Feb 79
Office development permits (q) 20 Apr 79
Official reserves (m) 11 May 79
Overseas trade of the UK analysis by industry (q) 6 Apr 79
analysis of trends (q) 8 Dec 78
direct exporters and credit terms (a) 21 Jul 78
export prospects (q) 16 Mar 79
import penetration (q) 9 Mar 79
invoicing in foreign currencies 3 Nov 78
performance 1963-1978 (a) 16 Mar 79
see also Balance of payments
Pension funds investment (q) 27 Apr 79
investments and assets (a) 10 Nov 78
Price Commission index (m) 20 Apr 79
Regional development grants (q) page 319
Research and development expenditure and employment 6 Apr 79
Restrictive trading agreements (q) 13 Apr 79
Retail prices index (m) page 311
Retail trades inquiry for 1977: provisional results 2 Feb 79
sales (m) 11 May 79
provisional (m) 27 Apr 79
stocks (m) page 310
Royalties: overseas transactions (a) 14 Jul 78
Securities, particulars of dealers in page 321
Selective financial assistance section 7 (m) 4 May 79
section 7 £10,000 or more (q) 9 Mar 79
section 8 (q) 16 Mar 79
Shipping nationality of vessels in UK seaborne trade (a) 23 Jun 78
UK revenue (a) 13 Oct 78
Steel consumption and stocks (q) 20 Apr 79
provisional (q) 18 Aug 78
Stocks manufacturers' and distributors' (q) 30 Mar 79
provisional (q) 2 Mar 79
manufacturers' (m) 27 Apr 79
retail (m) page 310
Television overseas payments and earnings (a) 25 Aug 78
Textiles activity in the industry (q) 6 Apr 79
carpet sales (m) 4 May 79
cotton industry production (m) 27 Apr 79
hosiery production (m) 27 Apr 79
wholesale houses' sales and stocks (m) 20 Apr 79
wool output (m) 27 Apr 79
exports (q) 2 Mar 79
Tourism foreign arrivals (m) 16 Feb 79
overseas travel and tourism (a) 6 Apr 79
overseas travel and tourism (q) 6 Apr 79
Unemployment (m) 27 Apr 79
Unit trusts, particulars of dealers in page 321
Wholesale prices average prices of selected commodities (a) 27 Apr 79
index numbers (m) page 312
initial summary (m) 11 May 79

Organisational information

Commercial representation guide centre pages
CRE contact points 24 Nov 78
Departmental publications (m) 11 May 79
ECGD lines of credit 30 Mar 79
ECGD local offices 6 Apr 79
EEC guide parts 1, 2 and 3 1 Dec, 24 Nov & 8 Dec 78
European public holiday guide (a) 8 Dec 78
Government statistics guide 5 Jan 79
Guide to departments 27 Jan 78
Guide to HM Customs and Excise 18 Aug 78
Guide to schemes of selective financial assistance 19 Jan 79
Index, Oct-Dec 16 Mar 79
OTAR contact points 13 Apr 79
Release dates of economic statistics (m) 27 Apr 79
Trade promotions guide (q) 20 Apr 79

Trade and Industry reader services

contact our sources

We shall be pleased to arrange for you to receive without obligation further information on subjects in our new products, and export services sections

Circle the number below found at the end of editorial items

READER SERVICE NUMBERS

301	311	321	331	341	351	361	371	381	391	401	411	421	431	441	451	461	471	481	491
302	312	322	332	342	352	362	372	382	392	402	412	422	432	442	452	462	472	482	492
303	313	323	333	343	353	363	373	383	393	403	413	423	433	443	453	463	473	483	493
304	314	324	334	344	354	364	374	384	394	404	414	424	434	444	454	464	474	484	494
305	315	325	335	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495
306	316	326	336	346	356	366	376	386	396	406	416	426	436	446	456	466	476	486	496
307	317	327	337	347	357	367	377	387	397	407	417	427	437	447	457	467	477	487	497
308	318	328	338	348	358	368	378	388	398	408	418	428	438	448	458	468	478	488	498
309	319	329	339	349	359	369	379	389	399	409	419	429	439	449	459	469	479	489	499
310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500

ensure a regular copy

Over 50,000 people now read Trade and Industry each week. Over 50,000 people in trade and industry, exporting and technology. People wanting facts and figures, prices and statistics. Ensure a regular copy on your desk every Friday.

Annual subscription includes postage.

I would like to take out an annual subscription to Trade and Industry

- ☐ Please invoice me/my company, or
- ☐ I enclose £34.00 for one year's subscription,*
- ☐ Charge one year's subscription to my HMSO account number .....

* European rate £37.00, Overseas airmail rate £50.00

Please tick appropriate square

name position

company

address

phone number

Please fill in your name and address and send the page to:

Trade and Industry, FREEPOST, London SW1H 0YZ

CLASSIFIED

Advertisement Department (Trade and Industry):
13 Great James Street. London WC1N 3DP **01-242 9478**

Optical Instruments

INSPECTION by PROJECTION

with Enbeeco Profile Projectors

useful for manufacturers of: SMALL COMPONENTS

Full details sent on request

NEWBOLD & BULFORD LTD.

Enbeeco House, Carlton Park,
Saxmundham, Suffolk IP17 2NL
Tel: Saxmundham 2933-4-5 Telex: 98584
Answerback: Enbeco G

Overseas Newspapers and Periodicals

SPAIN
Edition 1978/79

PRODEI
Catalogue of Spanish Producers, Exporters and Importers

15,000 first rank trading firms are incorporated; systematically classified by products manufactured, exported or imported, making a total of 80,000 entries and 10,000 trade items, giving the firms' names and full addresses. The entire book in four languages: English, French, German, besides Spanish. Volume of 1552 pages (28 × 22 centimetres). Price £26.

1st Vol. **Markets in Europe.** 9th Edition 1968. $10.00. 2nd Vol. **Markets Outside Europe.** 9th Edition 1976. $30.00. "Overseas Directories and Subscriptions" £2.50 (Airmail Edn.) 8oz. Directories Only. £1.50 (Air $10.—)

PUBLISHING & DISTRIBUTING CO. LTD.,
177, REGENT STREET, LONDON, W.1
Tel.: 01-734 6534/5 Telex WESTCHAM LONDON 268312/PUBDISCO
For 25 years representatives for publishers in over 100 countries for advertising and subscriptions

COMPONENTS MARKET IN THE USA

Subscriptions are invited to multi-client study on how to sell into this lucrative market plus guidance on business in the USA, conducted jointly by three organisations:

Mountain & Associates, UK
Parkland Overseas, UK & USA
Lindsey-Kaufman Co., USA

£1,850 per organisation, less £100 rebate for early subscription and up to 33.3% rebate on application to Terry Coram at the British Overseas Trade Board, London.

Write/phone **Peter Mountain, 27 Marsh Parade, Newcastle under Lyme, Staffs ST5 1BY**
Tel. 0782 618756

WANTED

All your gold washed scrap, plugs, sockets, edge connectors, PC boards, pins, etc. We collect and pay cash for any amount from 1 cwt. Minimum price £100-£200 per cwt.

P. SKELLERN METALS,
The Iron Yard (Est 1935),
Cutlers Green, Thaxted,
Essex CM19 2PL.
Tel. Thaxted 830862

Trade and Industry has 33,000 readers at DIRECTOR/SENIOR MANAGEMENT level every week

To reach them

01-242 9478

For Sale

HM CUSTOMS AND EXCISE
OFFER FOR SALE THE FOLLOWING VESSEL

VALIANT

LOA 81ft
Steel Hull
2 X Paxman 6YJCM Diesel Engines
786 BHP @ 1500 RPM
Accommodation for 6
Various equipment and spares
Fitted Decca 916 Radar
Marconi Falcon and Argonaut Radio
To be sold as lying at Gravesend.

Enquiries for full specifications and tender form to:- HM Customs & Excise Outfield Directorate Division D, Branch I, Room 103, Adelaide House, London Bridge, London EC4R 9DB. Telephone No: 01 626-1515 Ext. 2362.

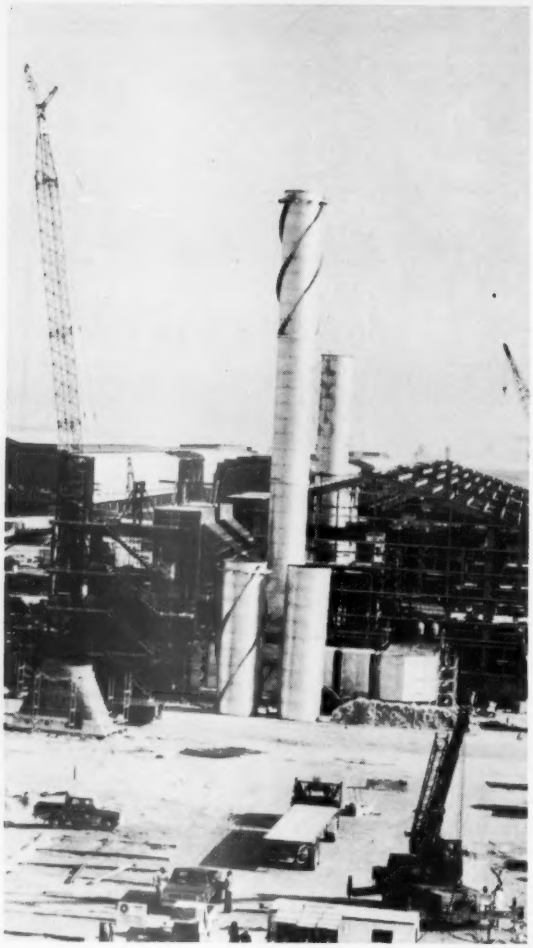
中文翻译与排版

CHINESE TRANSLATION AND TYPESETTING

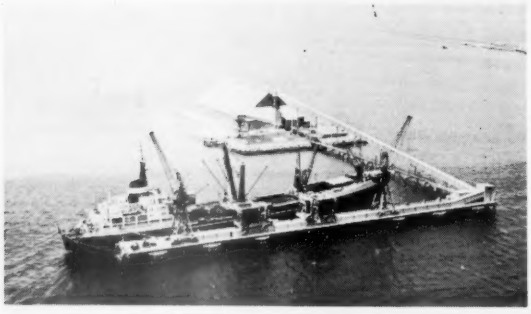
Will your Chinese publicity, tender, contract, instruction manual say precisely what you mean? Should it be in Mandarin or Cantonese? Will it be specially adapted by a Chinese writer or translated by an experienced translator?

Eurolinga has positive professional answers for British companies opening up trade with the Peoples' Republic of China. We translate technical material into current, idiomatic Chinese and typeset it too, using only mother-tongue translators and typesetters. As we do in Arabic, Japanese, Russian and every major world language.

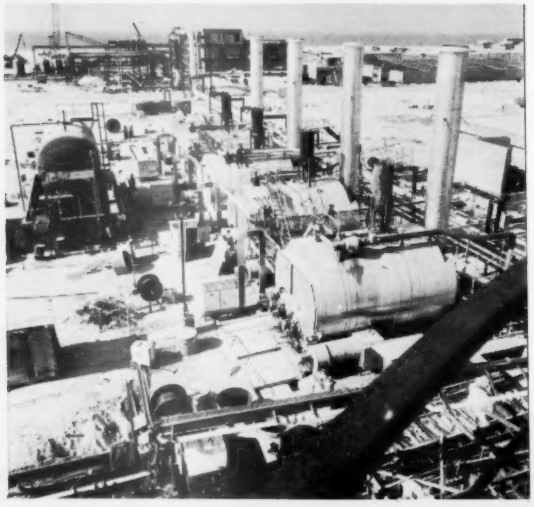
eurolingua
Professional Language Services Ltd.
15-16 Newman Street, Oxford Street, London W1P 3HD. Tel: 01-323 0645, 01-323 0631.



The Dubai Aluminium Smelter which will produce its first metal later this year



The Marine Facilities for the Aluminium Smelter in Bahrain



Part of the Power Station and Desalination complex for the Aluminium Smelter in Dubai

1979

Managing projects like these, helped to gain us The Queen's Award for Export Achievement

British Smelter Constructions Limited has established itself as one of the world's premier management organisations for the construction of complex manufacturing facilities.

Through its extensive experience in management and the obtaining of project finance from international money markets, BSCL is eminently placed to be able to assist both Governments and Industry in the conception and development of their resources.

The development of such resources during the past ten years has involved BSCL in the management of projects whose combined value exceeds £650 Million.

We have the necessary skills to manage any project, anywhere in the world, irrespective of its size or complexity.

British Smelter Constructions Limited

Flyover House, Great West Road,
Brentford, Middlesex TW8 9AR
Telephone 01-568 8877 Telex 27987

Registered as a newspaper Published by Her Majesty's Stationery Office, St. Crispins, Duke Street, Norwich NR3 1DN, for the Department of Industry, 1 Victoria Street, London SW1H 0ET. Printed by The Garden City Press Limited, Pixmore Avenue, Letchworth, Herts, SG6 1JS.

ISBN 0 11 725641 2
ISSN 0006-5323